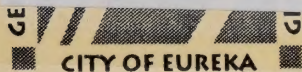


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Final Environmental Impact Report

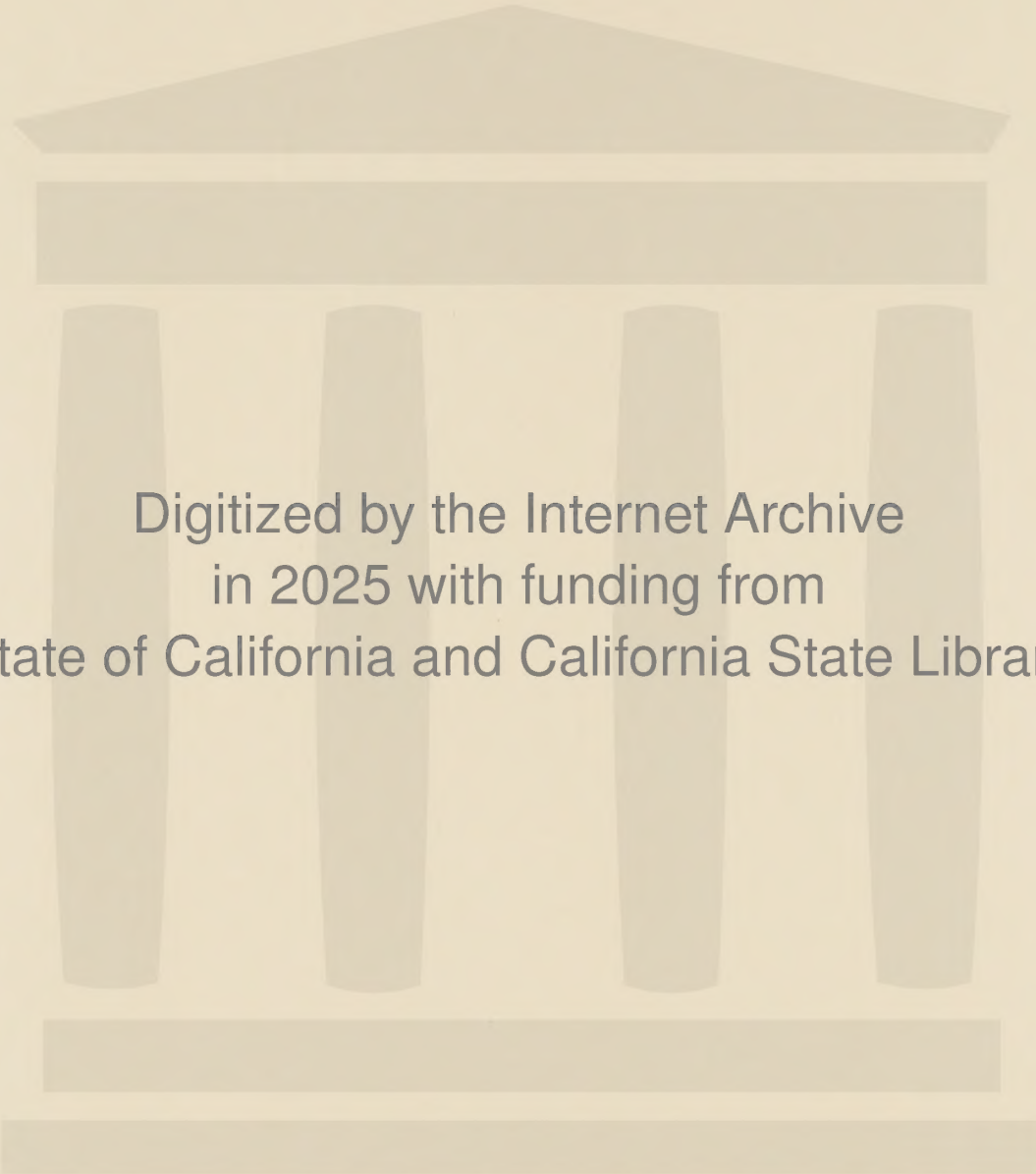
SCH #96072062

Prepared by:

J. Laurence Mintier & Associates
Dowling Associates
Oscar Larson & Associates
Brown-Buntin Associates



February 1997



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CITY OF EUREKA

GENERAL PLAN

Final Environmental Impact Report

SCH #96072062

Prepared by:

J. Laurence Mintier & Associates
Dowling Associates
Oscar Larson & Associates
Brown-Buntin Associates

February 1997

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INTRODUCTION

This *Environmental Impact Report* (EIR) on the City of Eureka *General Plan* has been prepared pursuant to the California Environmental Quality Act (CEQA). CEQA mandates the preparation of draft and final environmental impact reports for projects or programs that have the potential of resulting in adverse impacts on the environment. Detailed requirements concerning both content and process are set forth in the California Code of Regulations, Title 14, Chapter 3: *Guidelines for Implementation of the California Environmental Quality Act* (hereinafter referred to as *State CEQA Guidelines*).

THE PURPOSE OF THIS EIR

The purposes of CEQA (and thus EIRs) are summarized in Article 1 of the *State CEQA Guidelines*. Article 1 reads, in part, as follows:

§15002. General Concepts.

(a) Basic Purposes of CEQA. The basic purposes of CEQA are to:

- (1) Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- (2) Identify ways that environmental damage can be avoided or significantly reduced.
- (3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- (4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Subsection (f) of this section summarizes the purpose and content of an EIR:

(f) Environmental Impact Reports and Negative Declarations. An environmental impact report (EIR) is the public document used by the governmental agency to analyze the significant environmental effects of a proposed project, to identify alternatives, and to disclose possible ways to reduce or avoid the possible environmental damage.

- (1) An EIR is prepared when the public agency finds substantial evidence that the project may have a significant effect on the environment. (See §15064(a)(1).)

Subsection (g) summarizes the concept of "significant effect":

(g) Significant Effect on the Environment. A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project. (See §15382). Further, when an EIR identifies a significant effect, the government agency approving the project must make findings on whether the adverse environmental effects have been substantially reduced or if not, why not. (See §15091.)

§15121. Informational Document

- (a) An EIR is an informational document which will inform public agency decision makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency.
- (b) While the information in the EIR does not control the agency's ultimate discretion on the project, the agency must respond to each significant effect identified in the EIR by making findings under Section 15091 and, if necessary, by making a statement of overriding considerations under Section 15093.
- (c) The information in an EIR may constitute substantial evidence in the record to support the agency's action on the project if its decision is later challenged in court.

This EIR serves two basic purposes. First, it establishes the environmental framework for adoption of the *General Plan* and amendment of the Redevelopment Agency's plans, providing information to the public, Planning Commission, Redevelopment Agency, and City Council concerning the potential consequences of adopting the plan, and, second, it serves as a first-tier EIR for subsequent EIRs on projects implementing the *General Plan* (e.g., specific plans, individual projects).

RELATIONSHIP OF THE GENERAL PLAN AND EIR

The *State CEQA Guidelines* provides the following general directions concerning the coordination of planning and environmental impact assessment:

§15080. General.

To the extent possible, the EIR process should be combined with the existing planning, review, and project approval process used by each public agency.

The *State CEQA Guidelines* provides for combining the EIR with the general plan as follows:

§15166. EIR as Part of a General Plan.

- (a) The requirements for preparing an EIR on a local general plan, element, or amendment thereof will be satisfied by using the general plan, or element document, as the EIR and no separate EIR will be required, if:
 - (1) the general plan addresses all the points required to be in an EIR by Article 9 of these Guidelines; and
 - (2) the document contains a special section or a cover sheet identifying where the general plan document addresses each of the points required.

This *Environmental Impact Report (EIR)* documents the environmental considerations incorporated into the process of preparing the *General Plan* and evaluates the environmental implications and effects of the plan. In accordance with the two sections of the *State CEQA Guidelines* cited above, and in an effort to minimize repetition of information, three separate *General Plan* documents are being used to satisfy the requirements for an EIR. These are: 1) the *General Plan Policy Document*, which includes the complete set of diagrams, goals, policies, and programs that serve to address the potential environmental implications of development

in the Planning Area; 2) the *General Plan Background Report*, which describes existing conditions and trends in Eureka, serves as the comprehensive environmental setting discussion that provides the baseline for evaluation of potential environmental impacts; and 3) this *Environmental Impact Report*, which assesses the environmental implications and effects of the *General Plan* in the context of the requirements of CEQA. Together, these three documents address all of the issues required by state law to be covered in an EIR.

USE OF THIS EIR AS A PROGRAM EIR/MEA

The precise format of an EIR is not dictated by CEQA or the *State CEQA Guidelines*, but is left to the discretion of the lead agency preparing the EIR. Several types of EIR or alternatives for formatting EIRs are described in the *State CEQA Guidelines*. Of particular relevance to a general plan EIR are Program EIRs and Master Environmental Assessments (MEAs).

The *State CEQA Guidelines* describes a Program EIR as follows:

§15168. Program EIR.

- (a) General. A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:
 - (1) Geographically,
 - (2) As logical parts in the chain of contemplated actions,
 - (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
 - (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

The *State CEQA Guidelines* describes a Master Environmental Assessment as follows:

§15169. Master Environmental Assessment.

- (a) General. A public agency may prepare a Master Environmental Assessment, inventory, or data base for all, or a portion of, the territory subject to its control in order to provide information which may be used or referenced in EIRs or Negative Declarations. Neither the content, the format, nor the procedures to be used to develop a Master Environmental Assessment are prescribed by these Guidelines. The descriptions contained in this section are advisory. A Master Environmental Assessment is suggested solely as an approach to identify and organize environmental information for a region or area of the state.

The chief advantage of Program EIRs and Master Environmental Assessments (MEAs) is that they can be used to streamline CEQA compliance for a broad range of subsequent projects. Program EIRs or MEAs can be used as the basis for preparing initial studies on individual projects; they can be used as the basis for issuing negative declarations on individual projects; and they can be referenced in subsequent EIRs to address major and cumulative impacts of projects, allowing project-level EIRs to focus on more site-specific impacts. Preparing a Program EIR or MEA does not obviate the need for environmental analysis on individual projects, but it can expedite and simplify subsequent environmental reviews under CEQA.

For these reasons, this EIR has been organized and is intended to be used as both a Program EIR and a Master Environmental Assessment.

FORECASTING, DEGREE OF SPECIFICITY, AND SPECULATION

The *State CEQA Guidelines* includes the following discussions regarding forecasting, speculation, and the degree of specificity required in an EIR:

§15144. Forecasting

Drafting an EIR or preparing a Negative Declaration necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.

§15145. Speculation

If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.

§15146. Degree of Specificity

The degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.

- (a) An EIR on a construction project will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.
- (b) An EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or a local general plan should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.

This *EIR* estimates the amount of development under the *General Plan* that could generally be expected by 2010 and reaches conclusions regarding the severity of impacts based on these estimates. The significance of impacts beyond 2010 are deemed too speculative for the purposes of this *EIR* given uncertainty about long-term growth trends (beyond 2010) and future technological advances. The *EIR* focuses particularly on the cumulative impacts of development under the *General Plan* through 2010. The *EIR* is necessarily less detailed than would be an EIR on a specific development project. Future development projects will be required to conduct environmental analysis and analyze site-specific impacts.

ORGANIZATION OF THIS DOCUMENT

This *Environmental Impact Report* is divided into ten chapters, as follows:

Chapter 1 (Project Description and Impact Summary) describes the project setting, defines the project, explains Eureka's General Plan Update process, and summarizes the significant environmental effects of the plan.

Chapter 2 (Assumptions and Development Estimates) summarizes and explains the assumptions used in preparing the development estimates upon which the *EIR* assessment is based. It includes a discussion of the methodology used to calculate new development potential and projections for projected housing, employment, and employment growth that will be accommodated under the *General Plan*.

Chapter 3 (Land Use, Housing, and Population) evaluates the land use, housing, and population impacts of the plan.

Chapter 4 (Transportation and Circulation) assesses transportation and circulation impacts, including roadways, public transit, non-motorized transportation, and air transportation.

Chapter 5 (Public Facilities and Services) reviews impacts on public facilities and services, including water supply and delivery; wastewater collection, treatment, and disposal; storm drainage; law enforcement; fire protection; solid waste collection and disposal; public utilities; schools; and libraries.

Chapter 6 (Natural Environment) examines the plan's impacts on natural resources. The chapter covers water resources; agricultural and timberland resources; biological habitats and wildlife; special-status species and ecosystems; and air quality.

Chapter 7 (Health and Safety) addresses the plan's impacts on health and safety. The chapter covers seismic and geological issues; tsunami and flooding; wildland and urban fire potential; toxic materials; and noise.

Chapter 8 (Recreational and Cultural Resources) describes the plan's impacts on parks and recreation facilities and services and historical and archaeological resources.

Chapter 9 (Alternatives and Other Mandatory CEQA Sections) addresses mandatory EIR sections, including alternatives, significant irreversible effects, growth-inducing impacts, cumulative impacts, and mitigation monitoring.

Chapter 10 (Draft Policy Document/Draft EIR Comments and City Responses) contains the City's responses to comments submitted on the *Draft General Plan* and *Draft EIR*.

The *General Plan* and this *EIR* were prepared simultaneously in an effort to identify early on potentially significant implications of the plan and to build into the plan policies and programs to minimize or avoid these adverse implications. The format and content of the environmental impact analysis in this *EIR* reflect this approach to preparing the *General Plan*.

Accordingly, for each subject addressed in Chapters 3 through 8, the discussion is generally broken into the following six parts:

Environmental Setting: This section briefly summarizes pertinent information concerning existing conditions. Since the *General Plan Background Report* constitutes the comprehensive setting for the *EIR*, this section focuses on the highlights, while referring the reader to appropriate sections of the *Background Report*. In some cases, additional setting information has become available since publication of the *Background Report*. In these cases, the Environmental Setting section of the analysis has been expanded to cite additional essential information.

Methodology: This section discusses the assumptions and methodology used to identify implications and to assess impacts.

Implications of the Land Use Diagram: This section projects conditions that could result from the development of the land uses shown on the *General Plan Land Use Diagram* without consideration of the policies and programs included in the *General Plan Policy Document*. This part focuses primarily on implications of estimated development within the Urban Growth Area.

General Plan Policy Response: This section references specific policies and programs contained in the *General Plan Policy Document* that address the implications identified in the previous part. While this discussion focuses primarily on policies and programs that respond directly to the potential negative implications of the *Land Use Diagram*, it also in some cases identifies policies or programs that reduce impacts that may not be considered significant.

Impacts: This section describes any negative environmental impacts of the *Land Use Diagram* which would remain unresolved or potentially unresolved by the policies and programs contained in the *Policy Document*. The discussion includes an assessment of the severity of the impact, including a conclusion as to whether impacts are considered significant according to *CEQA*. The impacts are characterized as "significant," "potentially significant," or "less-than-significant."

Mitigation Measures: This section identifies mitigation measures that could lessen or eliminate negative impacts identified as "significant" or "potentially significant" according to *CEQA* standards.

CHAPTER 1

PROJECT DESCRIPTION AND IMPACT SUMMARY

1.1 INTRODUCTION

The subject of this *Environmental Impact Report (EIR)* is a comprehensive update of the City of Eureka General Plan. This chapter of the *EIR* describes the project setting, defines the project, explains the City of Eureka's *General Plan* update process, and summarizes the environmental effects of the *Plan* found to be significant or potentially significant according to the standards of the California Environmental Quality Act (CEQA). Chapter 2 of this *EIR* contains the assumptions and calculations used as the basis for the analysis in this report.

1.2 PROJECT SETTING

Located on California's North Coast, Eureka is the largest coastal city in California north of San Francisco. Eureka is situated on Humboldt Bay, which is the most important port between San Francisco and Portland, Oregon. San Francisco is approximately 285 miles south of Eureka, and Portland is approximately 350 miles north. Figure 1-1 shows Eureka's location within the county, state, and region.

A detailed description of the environmental setting of Eureka is contained in the *General Plan Background Report*, which is formally incorporated by reference as part of this *Environmental Impact Report*. The *Background Report* is organized according to the following eleven chapters:

- Chapter 1: Land Use
- Chapter 2: Housing
- Chapter 3: Urban Form and Design
- Chapter 4: Population
- Chapter 5: Economic and Fiscal Considerations
- Chapter 6: Transportation
- Chapter 7: Public Facilities and Services
- Chapter 8: Recreational and Cultural Resources
- Chapter 9: Natural Resources
- Chapter 10: Safety
- Chapter 11: Noise

1.3 PLANNING AREA, CITY LIMITS, AND SPHERE OF INFLUENCE

The following is a summary description of the Planning Area identified for the *General Plan*, the City's city limits, and the City's sphere of influence.

PLANNING AREA

According to state law, a general plan must cover all territory within the boundaries of the city as well as "any land outside its boundaries which, in the planning agency's judgment, bears relation to its planning. (Government Code §65300)" For purposes of the *General Plan*, the City of Eureka has identified a Planning Area that includes the incorporated city plus territory east to Indianola including Freshwater Corners, south to the northern boundary of the College of the Redwoods, west to include the Samoa Peninsula, and north to the town of Samoa.

The City of Eureka does not imply through its delineation of the Planning Area or its indication of the land use designations on the *Land Use Diagram* for the entire Planning Area that it will exercise jurisdiction over land use decisions in the area. The Planning Area boundaries simply make a statement that activities in unincorporated areas around Eureka have a relationship to the development of the city. The designations appearing on the *Land Use Diagram* for the unincorporated part of the Planning Area are intended to be a reflection of Humboldt County's plans for the area, not a prescriptive statement of the City's intentions for development in the area.

The Planning Area (including the incorporated city) contains approximately 46.8 square miles (30,000 acres) of land and water area, including streets and other rights-of-way. All of the area shown in Figure 1-2 falls within the Planning Area.

CITY LIMITS

The city limits define the area that is incorporated under the direct jurisdiction of the City of Eureka. Within this area, the City exercises sole authority for land use planning and development regulation. Eureka's city limits are defined on the west and north by Humboldt Bay and Arcata Bay, respectively, and include Indian and Woodley Islands. On the east, the city limits extend to Indianola Cutoff and then move west on a line parallel with Arcata Bay south of Murray Field to Harrison Avenue. On the south, the city limits extend to the Eureka Municipal Golf Course, but exclude the Cutten and Pine Hill areas.

While the diagrams, goals, policies, and programs of the *General Plan* represent the City's preferences for development of the entire Planning Area, the City retains direct authority or jurisdiction only over that part of the Planning Area within the city limits, either currently or in the future. The City assumes that any future annexations to Eureka will have to comply with the policies of the *General Plan*, and that proposals for annexation of land and development that do not will not be viewed favorably by the City.

As of 1996, the incorporated city contains approximately 16.4 square miles (10,500 acres) of land and water area, including streets and other rights-of-way. Figure 1-2 shows the city limits.

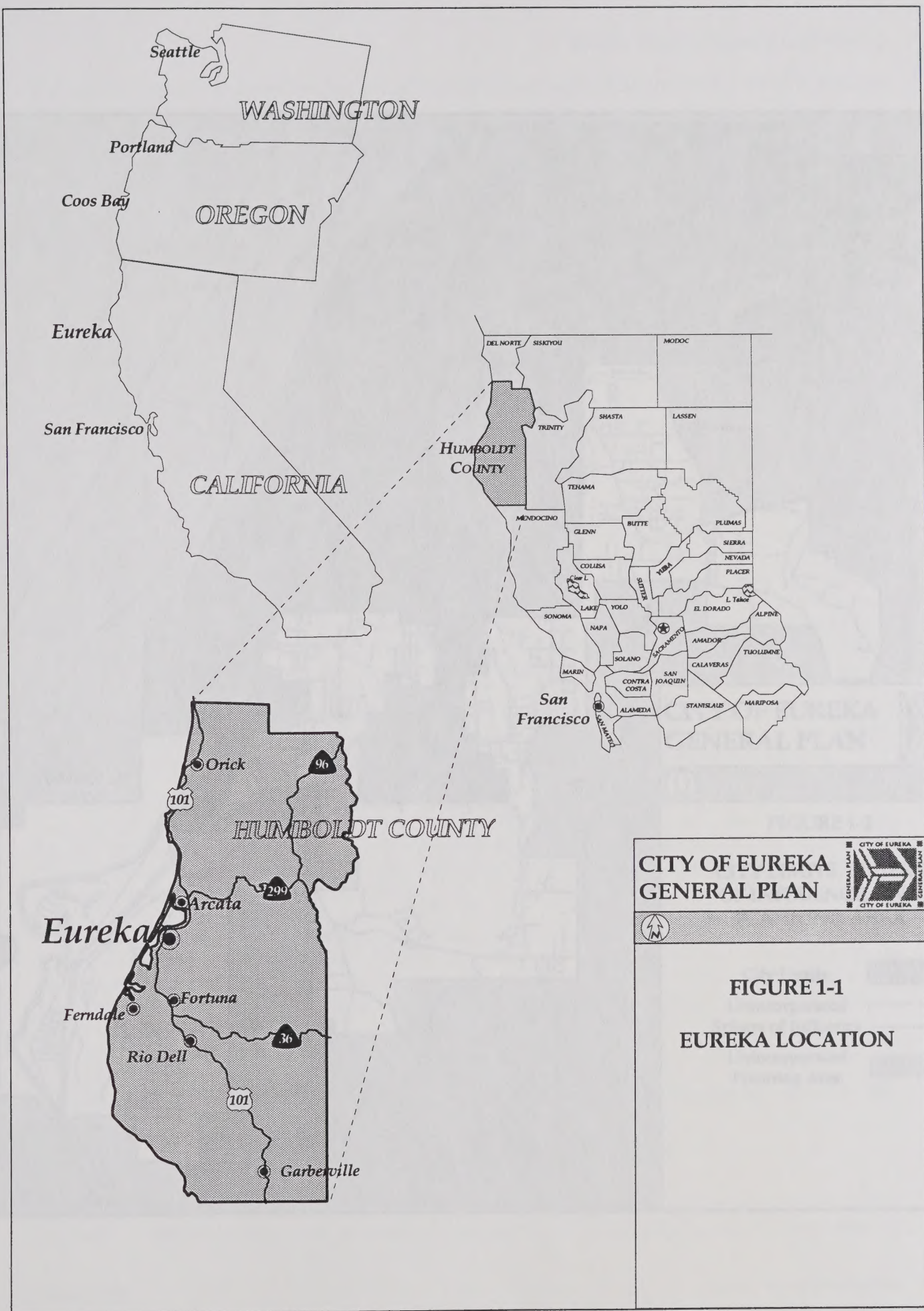
SPHERE OF INFLUENCE

As the basis in part for making decisions about organizational changes and annexations, the Humboldt County Local Agency Formation Commission (LAFCO) must adopt a "sphere of influence" for each local agency subject to LAFCO regulation. State law defines a sphere of influence as "a plan for the probable ultimate physical boundaries and service area of a local agency" (*Government Code §56076*). In practice, "ultimate" is typically defined as 20 years.

In determining the sphere of influence for a local agency, the LAFCO must consider and prepare a written statement of its determinations with respect to each of the following:

- The present and planned land uses in the area, including agricultural and open space lands.
- The present and probable need for public facilities and services in the area.
- The present capacity of public facilities and the adequacy of public services which the agency provides or is authorized to provide.
- The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency (*Government Code §56375.5*).

Figure 1-2 shows the sphere of influence boundaries for the City of Eureka as of 1996, as determined by the Humboldt County LAFCO. According to state law and LAFCO regulations, land outside of the City's sphere of influence may not be annexed to the city. State law and LAFCO regulations do, however, contain provisions for modifications of spheres of influence. Upon adoption of the updated *General Plan*, the City



will have the opportunity to discuss the appropriateness of its designated sphere and request modifications consistent with the policies of the *General Plan*.

1.4 THE GENERAL PLAN PREPARATION PROCESS

The City of Eureka initiated its General Plan Update program in December 1992 when it retained a multi-disciplinary consulting team headed by J. Laurence Mintier & Associates to assist the City in its comprehensive update. As the initial step in the update, in Spring 1993, the consulting team collaborated with the City's Community Development Department to reach out to the community to identify the important planning issues in Eureka. This outreach consisted of three separate efforts: a community concerns survey, interviews with City officials, and a townhall meeting. The results of these efforts were summarized in the *Community Concerns Summary Report*, published in June 1993. Also, in June 1993, the consulting team conducted a weekend-long community design charrette (workshop) at the Adorni Center to focus attention on Downtown, Old Town, and the Waterfront. The purpose of the charrette was to solicit public comment on the Core Area, specifically to explore ways to link the Downtown, Oldtown, and the Waterfront into a coherent town center. The charrette resulted in a series of schematic drawings that responded to community concerns. These drawings focused on land use, circulation and parking, and urban design factors such as historic preservation, pedestrian and economic vitality, and the quality of public space.

The first major report produced as part of the General Plan Update was the *Draft General Plan Background Report* describing existing conditions and trends in Eureka. After publication of the *Draft Background Report* in January 1994, the next major step in the Update process was to identify key constraints, opportunities, and options for the General Plan and to summarize them for public review. The result was the *Constraints, Opportunities, and Directions Report*, published in October 1994, which presented the most critical policy issues to be addressed in the new General Plan. These issues emerged from the *Draft General Plan Background Report*, *Community Concerns Summary Report*, the community design charrette conducted in June 1993, and extensive discussion with local officials and other community and business leaders.

Following publication of the *Constraints, Opportunities, and Directions Report*, the City held a townhall meeting in early November 1994 to present the report to the public, and in November and December 1994 the City Council and Planning Commission held joint public hearings to receive public input on the report.

In January and February 1995, the Planning Commission deliberated on the report and formulated its recommendations to the City Council. In March and April 1995, the City Council in turn deliberated and, by resolution, provided staff and the Consultants with policy direction for preparing the *Draft General Plan*. That direction provided the foundation for development of new policies and modification of existing policies for incorporation into the *Draft Policy Document*.

Following publication of the *Draft General Plan* and the *Draft EIR*, the City held townhall meetings and public hearings to receive public comments. The Planning Commission then deliberated and formulated its recommendations on the plan. The City Council in turn deliberated and provided policy direction on the plan. Following final revisions by staff and Consultants, the City Council adopted the plan in February 1997.

1.5 EUREKA GENERAL PLAN CONTEXT

The following discussions briefly describe conditions and trends in Eureka that are the context for this General Plan.

POPULATION AND EMPLOYMENT CENTER OF THE NORTH COAST

Approximately 27,500 persons currently (1996) live within Eureka's city limits, with another 20,000 to 25,000 residents in unincorporated areas immediately adjacent to the city. This combined population of

approximately 50,000 makes Eureka the second largest urban area in the north part of the state (after Redding) and the largest urban area in the North Coast Region. Eureka is also the economic and governmental center of the North Coast Region. It captures a large part of the retail sales and visitor accommodation activity in the region and, as the county seat, is home to numerous local, regional, state, and federal offices.

HIGH SCENIC AND RECREATIONAL VALUE

Eureka is located in the midst of great natural beauty. The city commands dramatic views of Humboldt Bay and is flanked on the east and south by wetlands and agricultural lands. To the southeast, the city's topography rises to merge with the Pacific Coast Range that forms a scenic backdrop to the Humboldt Bay plain. Eureka has tens of thousands of acres of public recreation lands within a one-hour driving radius, including Redwood National Park, Six Rivers National Forest, Humboldt Bay National Wildlife Refuge, Patrick's Point State Park, and Humboldt Redwoods State Park.

ECONOMIC BASE IN TRANSITION

Eureka's and Humboldt County's economy is in transition. The timber industry, the area's main historical economic activity, has been in decline for many years. The fishing industry is also in decline, but due to new products and aquaculture activities, has managed to hold its own in recent years. In recent years, government, service, and retail activities have been replacing these traditional sources of employment in the Eureka area. According to recent economic reports, tourism and small-scale manufacturing hold promise for economic development in the Eureka area. On the other hand, the prospects for significant port-related development appear to be limited in the next 10 to 15 years.

DEEPWATER PORT

Humboldt Bay has served as a major seaport on the Northern California coast for over 100 years. It is the only deep-draft port of commercial importance between San Francisco and Coos Bay. Humboldt Bay Harbor historically served large ships transporting timber and wood products and a substantial fishing fleet. Harbor activity has, however, diminished substantially with the decline of the timber and fishing industries.

WATERFRONT

Eureka has an extensive urban waterfront--some seven miles long--devoted primarily to commercial and industrial uses. There are six deepwater cargo facilities and eight fishing boat and other facilities in the incorporated area alone. There are also numerous warehouses, seafood processing plants, and other structures on the waterfront. However, much of Eureka's urban waterfront is in disrepair and/or underutilized. The development and redevelopment of the waterfront is subject to strict coastal regulations and is constrained in many areas by the presence of toxic soils and/or groundwater and unresolved tideland jurisdictional issues.

LIMITED VACANT DEVELOPABLE LAND

There is very little vacant developable land remaining within Eureka's city limits. By 1995, the city limits contained less than 30 acres of vacant residentially-zoned land, with the capacity to accommodate fewer than 300 new housing units. Vacant developable industrial and commercial land is also in short supply. Annexation potential is constrained by topographical, environmental, and financial impediments, and much of the surrounding unincorporated area is already developed.

HISTORIC BUILDING STOCK

Eureka has an impressive legacy of historically-significant buildings. The city's stock of Victorian-era homes, with over 1,500 identified structures, is one of the largest in California, and Old Town Eureka, with its numerous historic commercial buildings, is listed on the National Register of Historic Places. Unfortunately, several large historic commercial buildings in Downtown are constructed of unreinforced masonry (URM), posing a safety hazard in a region known for seismic activity. While many have been preserved and rehabilitated, other historic structures have either been poorly maintained and fallen into disrepair or have been demolished because of these conditions.

POTENTIAL FOR TOURISM

While there are many attractions for the vacationer in Humboldt County, Eureka has yet to establish itself as a major tourist destination. Eureka captures a majority of the total gross room receipts in Humboldt County, indicating the city's tourist accommodations dominate the market. There are, however, limited activities to keep tourists in Eureka for longer than an overnight stay. Eureka's Old Town and Central Waterfront hold the greatest potential for increasing the attractiveness of Eureka as a tourist destination, but suffer from blight and vagrancy. Furthermore, the Central Waterfront contributes little to tourism because tourist/retail activities are largely absent in the area. In both cases, there is significant potential for expanded tourism if economic and pedestrian vitality can be restored in these areas.

DECLINING RETAIL AND OFFICE ACTIVITY IN DOWNTOWN

Closely related to the prospects for improving tourism in Eureka is declining retail and office activity in Eureka's Downtown. Over the last several years, the Downtown area has lost much of its retail and office business to outlying retail areas. The largest of these is the Bayshore Mall, which opened in 1987. More recently, other areas like Henderson Center and the Westside Industrial Area have started to compete with Downtown for retail and office uses, as exemplified by the construction of the Price-Costco store in the Westside Industrial Area in 1994. If retail business continues to decline in Downtown, it will be difficult to maintain, let alone improve, the attractiveness of the area for tourism.

ACTIVE ARTS COMMUNITY

The Eureka/Humboldt County area is one of the leading art centers for regions of its size, according to a 1990 nationwide survey funded by the National Endowment for the Arts. Eureka has more than 50 non-profit arts organizations that serve the visual, performing, and literary arts in the community. It is also home to numerous art galleries, museums, and theaters. In September 1994, the City of Eureka designated a Cultural Arts Resource District in the Old Town/Downtown area. The district, and the expansion of arts and cultural activities that it will encourage, should enhance the attractiveness of the Old Town Area as a tourist destination and should also increase the overall level of pedestrian activity in the area.

U.S. HIGHWAY 101

Eureka's circulation system is dominated by a grid-street network, with U.S. 101 operating as two one-way streets as it bisects the city's Downtown. U.S. 101 carries heavy traffic, a significant part of which is made up of heavy trucks and recreational vehicles. While traffic problems on U.S. 101 have long irritated Eurekaans, nearly 30 years of study and discussion have not identified a feasible alternative to its current configuration.

REGIONAL ISOLATION

Eureka and the Humboldt Bay Area are isolated from the rest of California and other western states by distance, geography, and poor transportation connections. Eureka, which lies approximately 275 miles north of San Francisco and 350 miles south of Portland is physically surrounded by mountains and Humboldt Bay on the north, mountains on the east and south, and Humboldt Bay and the Pacific Ocean on the west.

Eureka's primary highway links to the rest of California--U.S. 101 and SR 299--are only two lanes in some stretches and are frequently closed by rockslides and road work. Eureka currently has no passenger rail service and only limited freight service due to low demand and poor track conditions. Scheduled flights at the Arcata-Eureka Airport in McKinleyville, the county's principal airport, are infrequent and expensive.

1.6 SUBJECT OF THIS EIR

The subject of this *Environmental Impact Report* is the adoption and foreseeable implementation of the *General Plan*. The *Eureka General Plan* consists of two documents: the *General Plan Background Report* and the *General Plan Policy Document*. The *General Plan Background Report*, which inventories and analyzes existing conditions and trends in Eureka, provides the formal supporting documentation for general plan policy, while the *Policy Document* includes the goals, policies, programs, and diagrams that represent the City's formal positions concerning land use development and environmental quality in the Planning Area.

The updated *General Plan* will address the requirements of state law for six of the seven state-mandated elements: (1) Land Use (2) Circulation (3) Safety (4) Noise (5) Open Space and (6) Conservation. As permitted by law, the updated plan will also include policies and programs addressing optional components of local importance (e.g., public facilities and services). The seventh mandatory element, the Housing Element, was adopted in December 1995 to meet specific statutory deadline requirements.

Upon adoption, the new General Plan will supersede the 1977 *General Plan*. In addition, it will absorb the Land Use Plan (LUP) of the *City of Eureka Local Coastal Program*, as adopted in 1984.

Chapter 2 of this *EIR* contains a detailed description of the assumptions that underlie the substantive analysis in this report.

SUMMARY OF MAJOR GENERAL PLAN PROPOSALS

As indicated earlier, the formal policy content of the General Plan is presented in Part II of the *Policy Document*. Part II is divided into ten sections, each of which deals with a single topical issue and several subissues related to the main topic. The following is a section-by-section summary of the major proposals set forth in the *General Plan*.

Section 1: Land Use and Community Design

This section is the most familiar part of a general plan. It contains the Land Use Diagram that prescribes the uses for all of the Planning Area, describes standards for each of the land use designations shown on the Land Use Diagram, and presents a series of goals, policies, and programs designed to guide day-to-day decisions concerning land use, development, and environmental protection in Eureka.

Land Use Diagram: The Land Use Diagram depicts 28 land use designations falling within six major categories, as shown in the following chart:

CATEGORY	DESIGNATION
Core	Residential-Office (C-RO)
	Retail Commercial (C-RC)
	Waterfront Commercial (C-WFC)
	Coastal-Dependent Industrial (C-CDI)
Residential	Rural Residential (RR)
	Estate Residential (ER)
	Low Density Residential (LDR)
	Medium Density Residential (MDR)
	High Density Residential (HDR)
Commercial	Neighborhood Commercial (NC)
	Community Commercial (CC)
	Highway Service Commercial (HSC)
	Automotive Service Commercial (ASC)
	General Service Commercial (GSC)
	Professional Office (PO)
	Waterfront Commercial (WFC)
Industrial	Medical Services Commercial (MSC)
	Light Industrial (LI)
	General Industrial (GI)
	Coastal-Dependent Industrial (CDI)
Public/Quasi-Public	Public/Quasi-Public (PQP)
	Civic Government Center (CGC)
	Park and Recreation (PR)
Open Space	Agricultural (A)
	Timberland (T)
	Natural Resources (NR)
	Water--Development (WD)
	Water--Conservation (WC)

In reviewing the Land Use Diagram, the reader should note five assumptions and qualifications concerning interpretation and the boundaries of the land use designations. First, in existing developed areas within the city limits, the designations are parcel-specific. This allows for the type of precise prescription of uses that is necessary in already-developed areas to ensure that new development considers existing land use patterns and is consistent with existing development.

Second, in the few undeveloped areas within the city that are designated for new development, the designations are more general to allow for greater latitude for determination of the boundaries between designations.

Third, in the unincorporated part of the Planning Area, the designations closely follow those of adopted Humboldt County plans (i.e., *Eureka Area Community Plan*, *Humboldt Bay Area Plan*, *Freshwater Community Plan*). In preparing the General Plan, the City translated each of the County's designations into the City designation that most closely corresponds. For more details on the County's land use standards and designations, the reader should consult the appropriate County plan.

Fourth, as noted earlier in this Summary, the City has incorporated the substantive policies of 1984 *City of Eureka Local Coastal Program* into the *Policy Document*. In translating the land use designations from the LCP into the designations appearing on the Land Use Diagram, some of the detailed descriptions from the LCP were generalized. Appendix B of the *Policy Document* explains more fully how the LCP policy was translated and includes the detailed descriptions of the designations in the LCP.

Finally, in interpreting and thoroughly understanding the City's overall land use and development philosophy, users of the *Policy Document* should understand that the goals, policies, and programs contained in Part II are as important, if not more so, than the Land Use Diagram itself. Accordingly, any review of

individual development proposals must consider the *Policy Document* as a whole, rather than focusing solely on the Land Use Diagram or on particular policies and programs.

Following are summaries of the General Plan's key land use proposals according to the major designation categories that appear on the Land Use Diagram.

Core Area: Eureka's Core Area is the historical center of urban activity in Eureka and the most intensely developed part of the city, as well as the principal urban center of Humboldt County. Because of these qualities, the City has developed a set of designations specifically focusing on the Core Area that are intended to enhance the vital mixed-use nature of existing development and to encourage new development that reinforces this vitality.

Residential Land Use: The five residential designations that appear on the *Land Use Diagram* combine with a set of Residential/ Neighborhood Development policies to create a strong foundation for maintaining Eureka's existing healthy residential neighborhoods, improvement of problem residential areas, and creating sound new neighborhoods.

Generally, the Core Area acts as the anchor for higher density residential uses, with densities generally decreasing as they move to the south and east from the Core.

The residential policy focus of the Plan emphasizes two main themes. The first is promotion of distinct, identifiable neighborhoods that incorporate parks, schools, shopping opportunities, and other daily support services. The second major theme is promotion of infill development as the preferred means of increasing residential opportunities in the area. This approach accomplishes the dual objectives of making the most effective use of existing facilities and services and discouraging suburban sprawl into the valuable natural areas surrounding the urban area of Eureka.

Commercial Land Use and Development: The principles of commercial development that the *Policy Document* promotes follow themes similar to those for residential development in that they promote efficient, neighborhood-oriented infill projects that take advantage of existing facilities and services, while discouraging sprawling strip commercial development. In addition, the policies and programs of the Plan reaffirm the primary role of the Core Area as the commercial center of not only Eureka, but also of Humboldt County and the California North Coast.

Industrial Land Use and Development: Eureka's economy has long been dependent on heavy industrial activity (e.g., lumber, milling, and fishing). Over the past several decades, however, Eureka's and Humboldt County's economies have changed. With the decline of the area's traditional economic base, the City has been compelled to focus its energy on creating a framework for encouraging new employment-generating development in Eureka. The Land Use Diagram and policies and programs of the *Policy Document* establish a solid City commitment to invite and support private investment in industrial activities that will provide a firm foundation for economic transformation and growth. Specifically, the *Policy Document* promotes the development of coastal-dependent industrial uses along the city's waterfront and reuse of vacant land in the Westside Industrial Area.

Public/Quasi-Public Land Use: Public uses are an important element in the overall fabric of a community. Accordingly, the *Policy Document* provides a framework for development of such public uses as government offices and facilities, schools, and parks and recreation facilities. Recognizing the status of governmental services as the largest single sector of Humboldt County's economy and Eureka's position as the county seat and regional economic center, the *Policy Document* supports the development of a vital public presence in Downtown Eureka through designation of a Civic Government Center and promotion of public development that contributes to overall economic health of Eureka. In addition, the *Policy Document* also

includes land use policies and programs that recognize and reinforce the essential role that public uses (i.e., parks, libraries, and schools) play in the development and maintenance of healthy neighborhoods.

Open Space: Eureka is located in an area with a remarkable amount and diversity of open space, ranging from the gulch greenways that are interspersed throughout the city, to the wetlands and sloughs adjacent to Humboldt Bay, to the farmed areas northeast and south of the Eureka terrace, to the impressive stands of timber in the southeastern part of the Planning Area. Recognizing the value that these resources contribute to the overall quality of Eureka's living environment as well as the local economy, the *Policy Document* grants high priority to protection and conservation of valuable open space. While the Land Use Diagram sets up the general land use regulatory framework for open space conservation, the detailed policies and programs in Section 6, Natural Resources, of the *Policy Document* provide the City's definitive strategy for protection and enhancement of open space.

General Land Use and Development Policies and Programs: In addition to policies and programs related directly to specific types of development or particular areas of the city, Section 1 of Part II of the *Policy Document* includes the City's policy commitment to promoting an overall land use and development pattern that follows fundamental principles of good planning. In particular, the *Policy Document* commits the City to the following:

- Promotion of neighborhood infill development over sprawl.
- Emphasis on efficient use of public facilities and resources rather than wasteful practices.
- Cooperation with other agencies involved in development regulation in the region rather than competition.
- Balancing of economic development needs and environmental protection needs.

Section 2: Housing

In December 1995, the City Council adopted the *City of Eureka Housing Element* as the initial effort in the comprehensive update of its General Plan. Section 2 of Part II of the *Policy Document* will consist of the policy portion of the adopted *Element*. Because it has already undergone formal public review, it has not been included in the public review draft. It will be added following adoption of the Plan.

Section 3: Transportation

The *Policy Document* addresses several transportation issues that are critical to the development of Eureka. The most outstanding consideration related to transportation in Eureka is the maturity of the city. Because most of the land in the city is either developed or permanently committed to its ultimate use, the range of options for dealing with some of Eureka's most important transportation issues is severely limited from a physical development standpoint. Furthermore, some solutions that may be physically feasible are almost certainly infeasible for economic and/or environmental reasons. The *Policy Document*, therefore, concentrates on several strategic solutions that will improve the overall operation of Eureka's transportation network, and which are feasible, both physically and fiscally.

U.S. 101 is Eureka's longest-standing, most difficult traffic problem, with its heavy traffic volumes, including a high percentage of trucks and recreational vehicles, dividing and disrupting the structure and activity patterns of the city. Since 1967, the City had been planning to develop a depressed freeway route (Eureka Freeway) that would have passed through Downtown between 9th and 10th Streets. The Circulation Diagram in the *Policy Document* does not include that improvement, which has been formally rejected by both the City and Caltrans. As an alternative, the *Policy Document* turns its efforts toward two approaches to addressing the problems created by traffic on 101. The first is to complete the extension of Waterfront Drive all the way to the Elk River Interchange, thus providing a parallel roadway that will provide local travelers an alternative to competing with the through-traffic that causes so much congestion on 101.

The other proposal in the *Policy Document* that deals with 101 traffic relates to the manner in which traffic is channeled through the city. There is little to alert travelers along the 4th/5th Street couplet of the proximity of the Core Area and its opportunities for visitors. The *Policy Document* includes several policies and programs that will focus attention on and increase access to the area, including the development of more formal, well landscaped "gateways" along the 4th/5th Street couplet.

Because any feasible long-term solution to the 101 problem is likely beyond the 20-year time frame of the General Plan, the *Policy Document* defers specific recommendations. It does, however, include a policy calling for the City to work with HCAOG, Caltrans, and the County to continue reviewing options for some sort of higher order facility (e.g., expressway or freeway).

In addition to addressing future roadway plans and improvements, Section 3 of Part II of the *Policy Document* contains goals, policies, and programs related to the following issues:

- Public Transit
- Bicycle Transportation
- Pedestrian Transportation
- Goods Movement
- Rail Transportation
- Water Transportation
- Core Area Circulation and Parking

The overall emphasis of the policies and programs under these topics is the establishment and maintenance of a well-rounded transportation network that includes fully-connected and intersecting streets, pedestrian paths, and bike paths leading to all destinations within the Planning Area. In addition, several policies focus on addressing some of Eureka's difficult parking problems, particularly in the Core Area.

Section 4: Public Facilities and Services

An important result of any comprehensive planning effort should be the assurance that all facilities and services needed to adequately serve development will be accounted for. While the development of specific plans for facilities and services is beyond the purview of the General Plan, the *Policy Document* does establish a framework for guiding planning decisions related to facility development and service provision. The general emphasis of the policies and programs in Section 4 of Part II is on ensuring adequate services, while discouraging unnecessary, wasteful, or inefficient extension of existing systems or development of new facilities. Specifically, the *Policy Document* contains goals, policies, and programs related to the following topics:

- Water Supply and Delivery
- Wastewater Collection, Treatment, and Disposal
- Stormwater Drainage
- Solid Waste Collection and Disposal
- Law Enforcement
- Fire Protection
- Schools

The policies and programs articulated under these topics will ensure that current and future residents of and businesses in Eureka are served by a well-rounded, efficient, and environmentally safe system of public facilities and services.

Section 5: Recreational and Cultural Resources

Eureka is blessed with an outstanding array of recreational and cultural opportunities. The city's physical setting provides outstanding natural opportunities for outdoor recreation, while the City's developed parkland and recreation programs provide ample opportunities for residents and visitors to participate in passive and active recreation. In addition, Eureka has unparalleled historic and cultural richness, including an outstanding stock of historically and architecturally significant buildings. The city also has an active arts community that provides Eureka residents and visitors access to a variety of fine and performing arts activities.

The goals, policies, and programs in Section 5 of Part II of the *Policy Document* articulate the City of Eureka's high level of commitment to ensuring high quality recreational opportunities for Eureka residents and visitors, preserving the city's rich cultural heritage, and supporting the continued development of Eureka's thriving arts community. The policy content of the section is divided into the following six topics:

- General Parks and Recreation
- Coastal Recreation and Access
- Recreation Services
- Arts and Culture
- Historic Preservation
- Archaeological Resources

Section 6: Natural Resources

As the earlier discussion of the open space designations on the Land Use Diagram indicates, Eureka is located in an area of outstanding and diverse natural quality. The goals, policies, and programs in Section 6 of Part II of the *Policy Document* accompany the open space designations on the Land Use Diagram to provide a high level of protection for the valuable natural resources in the Planning Area. The section addresses the following issues:

- Aquatic Resources and Marine, Wetland, and Riparian Habitat
- Agricultural Preservation
- Conservation of Open Space
- Timber Resources
- Air Quality--General
- Air Quality--Transportation/Circulation

In large part, the policies and programs in the *Policy Document* represent affirmations of the City's historical attention to protecting local natural resources. In particular, it carries forward the policies and programs from the City's Local Coastal Program (LCP), while in many cases strengthening the City's policy commitment by applying coastal zone policies citywide. The result is a system of well-defined natural areas that are protected from development.

The policies and programs in Section 6 reflect a particularly strong effort to protect the natural terrain, drainage, and vegetation of the community, while preserving superior examples of open space, such as the city's gulch greenways. In addition, the *Policy Document* formalizes the City's commitment to developing a comprehensive wetland development and protection strategy, as initiated in the City's LCP and articulated in the *Waterfront Revitalization Program*.

Section 7: Health and Safety

Eureka is located in a region that is subject to some potentially significant natural hazards. Most importantly, the area is vulnerable to earthquakes and their associated seismic effects. Section 7 of Part II of the *Policy Document* addresses the following health and safety issues:

- Seismic Hazards
- Geological Hazards
- Fire Safety
- Flooding
- Hazardous Materials and Toxic Contamination
- Emergency Response
- Residential Noise Exposure
- Noise Compatibility

The primary intent of all of the goals, policies, and programs listed under these topics is to protect Eureka residents, businesses, and visitors from the harmful effects of natural and man-made hazards. In doing so, the City hopes to protect both the physical well-being of Eureka residents and visitors and to ensure that development investments fully consider the implications of potentially hazardous conditions in the area.

Section 8: Administration and Implementation

This section contains goals, policies, and programs to ensure that the City of Eureka maintains a high level of attention to the General Plan by providing for routine review and update of the *Policy Document* and *Background Report* and ensuring that other City regulations and ordinances are consistent with the General Plan.

1.7 PROJECT ALTERNATIVES

CEQA requires that an EIR consider alternatives to a project (Section 15126 (A)), providing sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. As described earlier, to address the intent of this requirement and to provide for a meaningful opportunity to shape the *Draft General Plan*, the City prepared the *Constraints, Opportunities, and Directions Report*. This report, published in October 1994, presented the most critical policy issues to be addressed in the new General Plan. These issues emerged from the *Draft General Plan Background Report*, *Community Concerns Summary Report*, the community design charrette conducted in June 1993, and extensive discussion with local officials and other community and business leaders. Following publication of the report, the City conducted an extensive public review process that included a townhall meeting, City Council and Planning Commission joint public hearings, and separate deliberation meetings of the Planning Commission and City Council. The final result of the process was a City Council resolution providing staff and the Consultants with policy direction for preparing the *Draft General Plan*. That direction provided the foundation for development of new policies and modification of existing policies for incorporation into the *Draft Policy Document*.

Chapter 9 of this EIR more thoroughly describes the requirements of State law with respect to consideration of project alternatives, and outlines the City's approach to satisfying these requirements.

1.8 IMPACT SUMMARY

This *EIR* assesses the impacts of the *General Plan* by considering the impacts of development according to the *Land Use Diagram* and the policies and programs of the *Policy Document*. The *EIR* assesses the impacts of the *General Plan* as a whole to reach a determination concerning the level of significance of impacts for CEQA purposes. As described earlier, the *General Plan* and *EIR* were prepared simultaneously in an effort to incorporate environmental mitigation into the plan. As the two documents were prepared and analyzed, policies and programs were developed to reduce environmental problems and to mitigate potential adverse impacts.

In the following six areas, implementation of the *General Plan* would have a significant impact.

1. Roadway levels of service in excess of City standards
2. Contribution to regional nonattainment of State PM₁₀ air quality standards
3. Exposure to seismic hazards
4. Exposure to tsunami hazards
5. Exposure to noise levels in excess of City standards
6. Potential loss of historical resources

These impacts are summarized in the following section, and mitigation measures are cited, where available, that would reduce the significance of the impact.

Roadway Levels of Service in Excess of City Standards

Growth in the region will result in worsening of traffic service levels in the city, even without any development in Eureka. Growth in the region will result in traffic service levels exceeding the City's service level standards along segments of several roadways. Most of the traffic is not, however, the result of any new development within the city limits. Nonetheless, the *General Plan* provides for the extension of Waterfront Drive as a means of addressing traffic associated with development in Eureka, as well as for traffic created by development outside Eureka, particularly along U.S. 101. Overall, the *General Plan* therefore has beneficial impacts on the roadway system.

Projected growth in the region is expected to result in service levels of D to F along Myrtle Avenue. Additional development within the city limits according to the *General Plan* will result in a worsening of these conditions on some segments of Myrtle Avenue. The *General Plan* will, therefore, contribute to the cumulative negative impacts on this roadway. This is considered a significant, cumulative adverse impact.

No feasible alternative routes can be constructed to mitigate the impacts on Myrtle Avenue. Widening Myrtle Avenue would require additional right-of-way acquisition, which would be very costly and would have significant impacts on adjoining properties; for these reasons, it was not considered feasible to propose a major widening project on Myrtle Avenue. There are therefore no feasible mitigation measures to reduce the cumulative impacts on this roadway to a less-than-significant level.

Contribution to Regional Nonattainment of State PM₁₀ Air Quality Standards

The policies in the *General Plan* successfully address sources of most potential air pollutants, and implementing the policies will protect most aspects of air quality in the local airshed. However, the North Coast is currently in nonattainment of State PM₁₀ (small particulates) standards; the North Coast Unified Air Quality Management District (NCUAQMD) has not yet promulgated an approach which addresses PM₁₀ from residences in the Planning Area. Development according to the *General Plan* will contribute to PM₁₀ emissions, primarily from wood-fired space heaters. Accordingly, the effects of development under the *General Plan* are considered a significant impact.

The PM10 nonattainment status of the local air basin may require future action by the NCUAQMD and other local jurisdictions. The following mitigation measure would assist in addressing this issue.

M6.2: The City shall coordinate with all future efforts or control programs promulgated by the North Coast Unified Air Quality Management District to address PM10 generation within the city. This may include requiring the implementation of measures designed to reduce PM10 generated during construction operations. It may include adopting appropriate state and/or federal standards for wood-fired space heaters in new development or in redevelopment projects. If appropriate, it may also involve cooperation in retrofit incentive programs for existing developed areas.

Even with implementation of this mitigation measure, the air quality impacts associated with exceedance of the State's PM10 emission standard would still be considered significant. There are no feasible mitigation measures available to reduce this impact to a less-than-significant level.

Exposure to Seismic Hazards

The recent publication of a "planning study" for a potential Cascadia Subduction Zone earthquake (T. Topozada and others, *Planning Scenario in Humboldt and Del Norte Counties, California, for a Great Earthquake on the Cascadia Subduction Zone*; California Department of Conservation, Division of Mines and Geology, Special Publication 115; 1995) indicates a higher level of potential seismic risk in the Planning Area than previously assumed. Implementing the policies included in the *General Plan* adequately addresses the potential impacts from most sources of seismic and geological concerns in the Planning Area. The policies do not, however, address the potential seismic effects from Cascadia Subduction Zone (CSZ) activity to an extent which would allow a conclusion that these concerns are reduced to a less-than-significant level, in part because these effects still have not been characterized adequately. Additional development in these areas would expose more people and property to these risks. This is a potentially significant impact.

The following mitigation measure would help address potential CSZ effects:

M.6.3: The City shall cooperate with Humboldt County, the State Office of Emergency Services, Humboldt State University, the California Division of Mines and Geology, and the U.S. Geological Survey to develop a more adequate understanding of CSZ seismic risks and the potential effects of CSZ events on the city and its inhabitants. The City shall update its local preparedness programs, its building permit processes, and its General Plan policies as additional information becomes available about the risks from CSZ events, in order to better protect the city's inhabitants and visitors.

Even with this additional mitigation measure, it may not be possible to reduce the risks from a CSZ seismic event to a less-than-significant level.

Exposure to Tsunami Hazards

The primary concerns for the effects of development under the *General Plan* stem from potential tsunami effects resulting from a CSZ event (as summarized in the previous section), arriving in the Planning Area within minutes of a major earthquake. The *General Plan* would allow development or redevelopment in several areas that may be subject to tsunami inundation, including the areas west of Broadway / Highway 101 in the Eureka, King Salmon, and Fields Landing areas, on the Samoa peninsula, along the northern city waterfront, and on the islands north of the Eureka shoreline. Such development would expose residents and visitors to potentially significant risks from tsunami. The effects of such a tsunami would exacerbate the effects of the seismic event on emergency response capabilities, and the tsunami itself could severely affect some of the designated "critical facilities." Increases in global sea level associated with global warming could aggravate the general effects of inundation, both related to normal flooding and tsunamis.

Implementing the policies in the *General Plan* would address the potential concerns for flooding from "normal" sources in the Planning Area. The *General Plan* does not address the potential effects of tsunami from CSZ earthquake sources in the Planning Area, in part because these risks have still not been characterized adequately. This is considered a potentially significant impact.

The following mitigation measure would help address potential CSZ effects:

M.6.4: The City shall cooperate with Humboldt County, the State Office of Emergency Services, Humboldt State University, the California Division of Mines and Geology, and the U.S. Geological Survey to develop a more adequate understanding of CSZ-derived tsunami risks and the potential effects of CSZ-derived tsunami on the city and its inhabitants. The City shall update its local preparedness programs and its General Plan policies as additional information becomes available about the risks from CSZ-derived tsunami, in order to better protect the city's inhabitants and visitors.

Even with this additional mitigation measure, it may not be possible to reduce the risks from a CSZ-derived tsunami to a less-than-significant level.

Exposure to Noise Levels in Excess of City Standards

Development in the region, combined with development within the city limits according to the *General Plan*, would result in an increase in traffic noise levels. Increased noise levels associated with traffic may encroach upon existing noise-sensitive land uses, or further increase noise levels already in excess of 60 dB L_{dn}. The potential for existing noise-sensitive uses to experience increased traffic noise levels in excess of proposed standards due to cumulative increases in traffic levels is considered significant. There are no feasible mitigation measures available to reduce this impact to a less-than-significant level.

Potential Loss of Historical Resources

Over time, with or without adoption of the *General Plan*, some historic resources will be lost as the result of natural disasters, for health and safety reasons, and because it will not be economically feasible to restore or renovate them. Development resulting from the *General Plan* is unlikely to have major adverse effects on historical resources or districts. In fact, the *General Plan* includes policies promoting preservation of historic buildings and districts. Despite these efforts, redevelopment or nuisance abatement could result in the demolition or alteration of historically significant buildings or the disruption of historical neighborhoods. Impacts resulting from development according to the *General Plan* on historical resources could range from less-than-significant (the most likely result) to significant. This *EIR* is unable to draw more specific conclusions, because the degree of impact may differ depending on the specific conditions of historical properties and the timing of natural disasters. Such future conditions cannot be predicted. As a result, the impacts of the development activity under the *General Plan* are considered potentially-significant. There are no feasible mitigation measures to prevent the loss of any historic structures and reduce this impact to a less-than-significant level.

1.9 ISSUES OF CONTROVERSY AND ISSUES TO BE RESOLVED

Section 15123 of the *CEQA Guidelines* require an *EIR* to summarize areas of controversy known to the Lead Agency including issues raised by agencies and the public and issues to be resolved including the choice among alternatives and whether or how to mitigate significant effects.

As described above, the Eureka General Plan Update Process, as a result of the City's early solicitation of public input and the ensuing discussions related to the *Constraints, Opportunities, and Directions Report*, has provided extensive opportunities to both identify areas of controversy and make formal decisions concerning the alternatives related to these areas. These choices are reflected in the *General Plan*.

In the interest of providing additional opportunities for input, and as required by State law, the City of Eureka distributed a Notice of Preparation (NOP) to 29 public agencies, groups, and individuals in September 1995. The City received no comment letters responding to the NOP.

During the *Draft General Plan* public review process, numerous specific policy issues were raised and discussed. As a result of this discussion, the City modified several provisions of the *General Plan Policy Document* to address the concerns of residents, property owners, and other public agencies. Chapter 10 of this *EIR* contains copies of all of the written comments submitted during the 45-day review period for the *Draft EIR*, including comments submitted on the *Draft Policy Document*. For each of the substantive comments submitted on these reports, Chapter 10 summarizes the City's response, including an indication of how the *Policy Document* and *EIR* were modified.

CHAPTER 2

ASSUMPTIONS AND DEVELOPMENT ESTIMATES

This chapter summarizes estimated development potential under the *General Plan* and the assumptions upon which these estimates are based. The chapter presents estimates of development levels. These estimates provide the basis for much of the impact assessment in the rest of this report.

2.1 GEOGRAPHIC BASIS FOR ANALYSIS

As described in Chapter 1, the *Land Use Diagram* designates land uses for the entire Planning Area. The Planning Area for the Eureka General Plan includes the incorporated city plus territory east to Indianola including Freshwater Corners, south to the northern boundary of the College of the Redwoods, west to include the Samoa Peninsula, and north to the town of Samoa. The Planning Area covers approximately 46.8 square miles (29,960 acres) of land and water area, including streets and other rights-of-way, of which 35 percent (10,477 acres) is within Eureka's city limits and the remainder is unincorporated. Figure 1-2 in Chapter 1 of this *EIR* shows the Planning Area and the Eureka city limits.

This chapter quantifies existing and new growth and development that would be accommodated by the *General Plan* in terms of housing stock, population, and commercial and industrial development and employment. Projections of future growth and development are based on the application of development assumptions to the land use designations shown on the *Land Use Diagram*.

The assumptions used for assessing impacts within the Planning Area are described below.

CITY LIMITS

Eureka's city limits are defined on the west and north by Humboldt Bay and Arcata Bay, respectively, and include Indian and Woodley Islands. On the east, the city limits extend to Indianola Cutoff and then move west on a line parallel with Arcata Bay south of Murray Field to Harrison Avenue. On the south, the city limits extend to the Eureka Municipal Golf Course, but exclude the Cutten and Pine Hill areas. The incorporated city contains approximately 16.4 square miles (10,477 acres) of land and water area, including streets and other rights-of-way.

While the *Policy Document* includes provisions supportive of annexation of currently-unincorporated territory (see Policy 1.A.3.), the analysis in this *EIR* does not assume annexation of any particular area. Such an assumption would imply speculation concerning where and when such annexations might occur, as well as what type of development would be added to the city limits. In the interest of avoiding such speculation, the analysis in this *EIR* focuses on potential development of vacant and underutilized lands within the current city limits.

ADJACENT UNINCORPORATED AREAS

The *Land Use Diagram* shows land use designations for approximately 30.44 square miles (19,483 acres) of unincorporated area within the Planning Area, including Myrtletown, Pine Hill, Cutten, Ridgewood Heights, Humboldt Hill, Freshwater, Kneeland, Manila, Spruce Point, King Salmon, Fields Landing, and the Samoa Peninsula. The designations shown for these areas reflect the land use maps from the County's plans covering these areas (i.e., the *Eureka Community Plan*, the *Humboldt Bay Area Plan*, and the *Freshwater Community Plan*).

While this *EIR* does not assume any particular annexations for the purpose of development within the time frame of the General Plan, the City assumes that the County will continue to allow future development consistent with adopted County plans for those areas.

2.2 DEVELOPMENT ASSUMPTIONS FOR ASSESSING IMPACTS

As the basis for the analysis in this *EIR*, the City and its consultants made several assumptions concerning the amount, timing, and jurisdiction of development that could occur within the Planning Area. Following are descriptions of these assumptions.

AMOUNT OF DEVELOPMENT

The analysis presented in this *EIR* relates principally to the effects that future development consistent with the *General Plan* could have on the Planning Area's environment. In order to characterize these effects, the City had to prepare estimates of the amount of development that could occur within the Planning Area. This involved making assumptions about the amount and location of land that is or will be available for development and the intensity of development that could occur on that land. The following descriptions explain the City's assumptions concerning these two issues.

Land Available for Development

To determine the amount of development that could occur under the General Plan within the city limits, the City first identified land that is either vacant or underutilized within the city limits. To derive information on vacant land and underutilized (i.e., not developed to its permitted capacity), the City relied on a citywide parcel-based database containing information on the development status of property within the city limits. The accuracy of this information was confirmed using spot field checks. The acreage column in Table 2-2 summarizes the amount of land that was assumed to be available for development under each of the land use designations appearing on the *Land Use Diagram*.

In addition to identifying vacant and underutilized land, the City identified potential for intensification of residential development in developed areas. This effort, which relied on information originally developed for the City's *Housing Element*, focused on additional residential units in otherwise-developed nonresidential buildings (mostly in the Core Area), additions of second units to existing homes, and conversion of single-family homes to multiple-unit dwellings (as permitted through City zoning regulations).

Density/Intensity Assumptions

In estimating the increment of new development that could occur on the vacant and underutilized property within the city limits, the City's consultants made several assumptions concerning the density and intensity of development that could occur given the standards and policies of the *General Plan*.

To prepare estimates of development potential for vacant residential parcels, as reflected in the potential dwelling units, the consultants generally applied the *General Plan's* residential density standards to vacant land on a parcel-by-parcel basis, with some accounting for constraints, such as natural features or difficult parcel configurations (i.e., steep slopes or substandard lot sizes). The estimates assume maximum permitted density as reflected in the density standards in Table 2-1.

The potential for residential intensification in the Core Area was derived from estimates originally prepared for the update of the City's *Housing Element*, as were estimates of second dwelling unit capacity and residential conversion.

As the foundation for estimates of the number of residents that might ultimately reside in new units, the consultants first assumed an overall five percent housing vacancy rate and then assumed an average household size for each land use designation. The five percent vacancy rate reflects a healthy level of residential unit vacancy and the average overall household size estimates were derived from estimates prepared by the California Department of Finance. The consultants further refined the household size estimates to develop assumed estimates for each of the *General Plan's* residential and Core Area land use designations. The refinements reflect variations in household size associated with different types of residential units (e.g., single-family homes typically have more residents per unit than apartments). They are shown in Table 2-1.

The development potential for non-residential parcels, as reflected in the potential square footage of building area, was derived mathematically by applying 80 percent of the maximum FAR for each designation, as shown in Table 2-1, to the parcel area of vacant and underutilized properties. The result is a square footage estimate for each parcel that is 20 percent lower than what could theoretically be permitted. This downward adjustment yields a more realistic estimate of the level of development that would actually occur, given typical development trends.

The potential employee estimates were derived by applying typical employment densities for each type of development to the potential building square footage, as shown in Table 2-1.

TABLE 2-1					
EIR DEVELOPMENT ASSUMPTIONS					
Category	Designation	Residential Density (DUs/Net Acre)	Maximum Floor-Area Ratio (FAR)	Assumed Residents Per Unit	Assumed Square Feet per Employee
Core	Retail Commercial (C-RC)		3.00	1.5	500
	Waterfront Commercial (C-WFC)		1.00	1.5	500
	Coastal-Dependent Industrial (C-CDI)		0.50		1,000
	Residential Office (C-RO)		1.50	1.5	300
Residential	Rural Residential (RR)	Up to 1.0		2.7	
	Estate Residential (ER)	1.1 to 4.0		2.7	
	Low Density Residential (LDR)	4.1 to 8.0		2.7	
	Medium Density Residential (MDR)	8.1 to 18.0		2.5	
	High Density Residential (HDR)	18.1 to 30.0		1.5	
Commercial	Neighborhood Commercial (NC)		0.50		500
	Community Commercial (CC)		0.35		500
	Highway Service Commercial (HSC)		0.50		500
	Automotive Service Commercial (ASC)		0.35		500
	General Service Commercial (GSC)		0.50		500
	Professional Office (PO)		1.00		300
	Waterfront Commercial (WFC)		1.00		500
	Medical Services Commercial (MSC)		1.00		500
Industrial	Light Industrial (LI)		0.50		1,000
	General Industrial (GI)		0.50		1,000
	Coastal Dependent Industrial (CDI)		0.50		1,000

Incremental Development Estimates within the City Limits

Table 2-2 shows the results of applying the density and intensity assumptions described above to the amount of land available for development also described above. The table reflects the total number of additional dwelling units and resulting population that could be accommodated by the *General Plan*, as well as the total amount of commercial and industrial building space.

TABLE 2-2						
CITY OF EUREKA GENERAL PLAN NEW DEVELOPMENT POTENTIAL						
Designation	Label	Acres	Development Potential			
			Dwelling Units	Potential Residents	Square Footage	Potential Employees
Core						
Retail Commercial	C-RC	4.38	197	293	79,453	159
Waterfront Commercial	C-WFC	7.80			271,814	544
Coastal-Dependent Industrial	C-CDI	0.95			16,553	17
Residential Office	C-RO	0.20			10,454	35
Subtotal		13.33	197	293	378,275	754
Residential						
Rural Residential	RR			-	-	-
Estate Residential	ER			-	-	-
Low Density Residential	LDR	14.4	85	204	-	-
Medium Density Residential	MDR	10.3	169	406	-	-
High Density Residential	HDR	3.8	96	137	-	-
Secondary Units and Conversions*			300	428		
Subtotal		28.4	650	1,175	-	-
Commercial						
Neighborhood Commercial	NC	0.4	-	-	7,492	15
Community Commercial	CC	0.7	-	-	8,782	18
Highway Service Commercial	HSC	14.1	22	33	243,239	486
Automotive Service Commercial	ASC	0.4	-	-	4,513	9
General Service Commercial	GSC	30.6	-	-	396,222	792
Office	PO	-	-	-	-	-
Waterfront Commercial	WFC	17.4	-	-	603,567	1,207
Medical Services Commercial	MSC	0.5	-	-	16,727	33
Subtotal		64.2	22	33	1,280,542	2,561
Industrial						
Light Industrial	LI	0.7	-	-	12,720	13
General Industrial	GI	42.1	-	-	734,247	734
Coastal Dependent Industrial	CDI	22.2	-	-	386,464	386
Subtotal		65.1	-	-	1,133,431	1,133
TOTAL		171.0	869	1,501	2,792,248	4,448
*Estimates derived from City of Eureka General Plan Housing Element, adopted December 1995.						

Incremental Development Potential Within Unincorporated Planning Area

The incremental development within the unincorporated areas of the Planning Area is based on development estimates from Humboldt County planning documents for these areas. As noted above, the County has adopted three plans that cover different parts of the unincorporated Planning Area: the *Eureka Community Plan*, the *Humboldt Bay Area Plan*, and the *Freshwater Community Plan*. Following are brief descriptions of these plans and the amount of development they anticipate within the Eureka General Plan Planning Area.

Eureka Community Plan: The *Eureka Community Plan*, which was updated in 1995, covers approximately 14.5 square miles of land area, extending from the Eureka city limits south to include College of the Redwoods and east to Ryan Creek. Existing land use includes residential, commercial, industrial, and resource-related uses. Approximately 12.5 square miles of the Eureka Community Plan area lie within the Eureka General Plan Planning Area. Approximately 45 percent of the entire Eureka Community Plan area is designated as Timber Production Zone (TPZ), 18 percent is prime agricultural land, and 37 percent is devoted to rural and urban use. Most residential use in the County's Eureka Community Plan Area is also contained in the City's Eureka General Plan Planning Area in five urban areas: West Myrtletowne, Pine Hill, Cutten, Ridgewood Heights, and Humboldt Hill.

As of 1993, there were approximately 3,830 dwelling units and 10,800 persons in the Eureka Community Plan area, according to County estimates. With the update of the *Eureka Community Plan*, the County identified the potential for approximately 5,000 additional dwelling units at buildout of the area covered by the plan. Of these potential units, an estimated 4,500 fall within the Planning Area of the City of Eureka General Plan. This includes approximately 2,000 potential units that are located in areas zoned TPZ (timberland production zone), which means that the earliest these units could develop is the year 2004. Of the remaining 2,500 potential units, approximately 1,500 would occur on infill sites in otherwise developed areas, while 1,000 would occur on large blocks of undeveloped land.

Freshwater Community Plan: The *Freshwater Community Plan*, adopted in May 1985, contains approximately 14.0 square miles of land area, extending from Ryan Creek east to include Freshwater and Kneeland and from the Coastal Zone Boundary south to Guptil Gulch. Approximately five square miles of the Freshwater Community Plan area lie within the Eureka General Plan Planning Area. The primary land use in this part of the Freshwater Community Plan area is commercial timber production, and most timber production land is designated as Timber Production Zone (TPZ). Residential uses in the Eureka General Plan Planning Area part of the Freshwater Community Plan area are concentrated near Myrtle Avenue and the Cumming Road area. Commercial uses are limited to the Indianola area.

When it was adopted in 1985, the *Freshwater Community Plan* stated an incremental development capacity of 393 units. Much of this capacity fell within the City of Eureka General Plan Planning Area, mostly in areas designated for very low-density rural residential uses along Pidgeon Point Road and Myrtle Avenue.

Humboldt Bay Area Plan: The *Humboldt Bay Area Plan*, adopted in July 1989, extends from the Mad River south to Hookton Road and includes Arcata Bay, the Samoa Peninsula, South Humboldt Bay, and the South Spit. The area also runs inland to include the flood-prone bottomlands south of the Mad River, drainages at Freshwater Creek and Elk River, and Hookton Slough. All of this territory is located within the Coastal Zone Boundary. Approximately 13 square miles of the Humboldt Bay Area Plan area lie within the Eureka General Plan Planning Area. The primary land use in this part of the Humboldt Bay Area Plan area is agriculture and natural resources. Residential uses are concentrated adjacent to Eureka in Myrtletowne and Pine Hill. There are smaller residential areas in Manila, Spruce Point, King Salmon, and Fields Landing. Commercial uses are mainly located at Spruce Point, King Salmon, and Fields Landing. Industrial uses are located primarily on the Samoa Peninsula.

Because of the predominance of development constraints in the area covered by the Humboldt Bay Area Plan, the Plan anticipates very little development within the Eureka General Plan Planning Area.

TIMING OF DEVELOPMENT

In addition to the understanding of how much and where development is likely to occur, the assessment of the development-related effects of development permitted under the *General Plan* requires an understanding of when development is likely to happen. For purposes of this *EIR*, the City assumes that all of the development capacity reflected in Table 2-2 (i.e., within the city limits) will occur by the year 2010, which is the planning horizon for the General Plan Update. This means that, effectively, the analysis in this *EIR* focuses on buildout of the *Land Use Diagram*.

For the unincorporated Planning Area, the City assumes that development will continue to proceed according to Humboldt County's plans for the area. As described above, this includes a significant number of potential residential units in the area covered by the County's *Eureka Community Plan*. The County estimates that approximately 1,000 units of this residential development could occur within a relatively short timeframe. The land on which these units might be constructed is concentrated immediately south of the City of Eureka city limits. The other County plans that cover territory within the Planning Area (*Freshwater Community Plan* and *Humboldt Bay Area Plan*) have very little overall development potential, most of which is infill, and the pace of development is expected to be slow.

JURISDICTION OF DEVELOPMENT

For purposes of the analysis in this *EIR*, all of the development expected to occur according to the *General Plan* will occur within the city limits and under the jurisdiction of the City of Eureka. In other words, the analysis does not assume annexation of any particular area for development under the jurisdiction of the City. Instead, development occurring within the unincorporated Planning Area is assumed to do so under the jurisdiction of Humboldt County according to the County's plans for the area, as described above.

SUMMARY OF DEVELOPMENT ASSUMPTIONS

The information described above reflects a range of development-related considerations concerning this *EIR*. To summarize, this *EIR* assumes the following:

- New development under the *General Plan* will be a combination of development of currently-vacant and underutilized land and residential intensification of existing development (i.e., addition of units to non-residential buildings in the Core Area, addition of secondary units to existing single-family homes, and conversion of existing single-family homes to multiple-family dwellings).
- All of the vacant land within the existing city limits will develop (i.e., buildout) by the year 2010.
- Development occurring according to the *General Plan* will occur within the existing city limits under the jurisdiction of the City of Eureka. This *EIR* does not assume any particular annexation of vacant, currently unincorporated land for development under the purview of the City.
- Development will continue to take place in the unincorporated part of the Planning Area under County jurisdiction, according to adopted County planning policies.

These are the basic development assumptions upon which the analyses in the subsequent chapters, including all impact conclusions and related mitigation recommendations, are based.

CHAPTER 3

LAND USE, HOUSING, AND POPULATION

This chapter discusses potential impacts of the *General Plan* associated with land use, housing, and population (including jobs/housing balance).

3.1 LAND USE AND LAND USE PLANS

ENVIRONMENTAL SETTING

Existing Land Use

Existing urban land characteristics are described in Chapter 1 of the *General Plan Background Report* and development potential estimates for the *General Plan* are presented in Chapter 2 of this *EIR*. Eureka's city limits encompass about 16.4 square miles.

At an estimated 50,000 population for the greater Eureka area, it is the second largest urban area (after Redding) in the north part of the state and the largest urban area in the North Coast Region. As the largest city and the County seat, Eureka is also the economic and government center of the North Coast region.

Residential development is the predominant land use in Eureka. Industrial development is located primarily along the waterfront and harbor areas. Older commercial uses are found in the Downtown/Old Town area, with newer commercial centers at the Bayshore Mall, in the Broadway corridor and Westside Industrial Area, and Henderson Center and Myrtle town.

There is very little vacant developable land remaining within the city limits. By 1996, the city limits contained only about 28 acres of vacant residentially-zoned land, while vacant commercial and industrial combined for another 129 acres. Annexation potential is constrained by topographical, environmental, and financial impediments. Furthermore, much of the surrounding unincorporated area is already developed. While the City has had discussions with owners of undeveloped property in the unincorporated Planning Area concerning annexation, no formal applications have been submitted to the Humboldt County Local Agency Formation Commission.

1977 Eureka General Plan

Until adoption of the new General Plan, the 1977 *General Plan* will operate as the current plan for land use in Eureka. The 1977 *Plan* is summarized in Chapter 1 of the *General Plan Background Report*.

1984 Local Coastal Program Land Use Plan

In May 1984, the City of Eureka adopted its Local Coastal Program (LCP) in accordance with the California Coastal Act. The LCP includes a Land Use Plan (LUP) that governs land use and development within the Coastal Zone. Upon adoption, the LUP superseded the 1977 General Plan and preexisting zoning for the area of Eureka within the Coastal Zone. The LCP contains numerous goals and policies related to land use that are implemented primarily through land use and zoning designations, which, in the case of Eureka's LCP, are synonymous (i.e., land use designations also serve as zoning designations).

Eureka Redevelopment Agency Project Area Plans

According to State redevelopment law, the plans and programs of redevelopment agencies must be consistent with the general plan for the jurisdictions in which they operate. Redevelopment plans are typically programmatic in nature, with very little emphasis on specific land use initiatives. The most definitive statement of the Eureka Redevelopment Agency's development policies for its three project areas is contained in its *Implementation Plan*, which was adopted in December 1994. That plan sets out goals, objectives, policies, and implementing activities/programs according to which the Agency will operate. Table 3-1 lists the goals and policies for the Agency's three projects.

TABLE 3-1 EUREKA REDEVELOPMENT AGENCY GOALS AND OBJECTIVES	
Eureka Century III NDP Phase I Urban Renewal Plan	
Goal	To revitalize that portion of Eureka's core area containing the Old Town district
Objectives	• To eliminate economic and physical deficiencies and other blighting factors. • To eliminate economic deterioration and underutilization of property. • To facilitate coherent development among the project areas and encourage arts-related development and activities to create an appealing destination for local residents and tourists.
Eureka Century III NDP Phase II Urban Renewal Project	
Goal:	To revitalize that portion of Eureka's core area containing the eastern portion of Old Town and adjacent districts while preserving the architectural and historical heritage of the area.
Objectives	• To eliminate physical deficiencies and improve the quality of the built environment adjacent to Old Town and U.S. 101 corridor to conform to the high standard of quality found in the remaining area. • To strengthen and stimulate commercial activity in the area. • To facilitate coherent development among the project areas and encourage arts-related development and activities to create an appealing destination for local residents and tourists.
Eureka Tomorrow Redevelopment Project	
Goal:	To revitalize Eureka's core area by enhancing the waterfront for both industrial and recreational purposes, facilitating the development and redevelopment of the industrial areas, preserving and strengthening the residential areas and commercial areas, and improving public space and facilities.
Objectives:	• To revitalize the Eureka waterfront and eliminate blighting influences. • To eliminate physical deficiencies and stimulate redevelopment and development of the industrial areas. • To eliminate blighting influences and improve and strengthen residential neighborhoods and supporting commercial areas.
Source: <i>City of Eureka Redevelopment Agency Implementation Plan</i> , December 1994.	

In addition to the goals and policies shown in Table 3-1, the *Implementation Plan* describes four activities or programs to implement the goals and objectives. These are as follows:

- **Waterfront Revitalization Activities.** The Agency will provide assistance and sponsor activities which will improve, rehabilitate, develop and redevelop the waterfront. These activities include assistance for rehabilitation of existing waterfront properties, the construction and reconstruction of streets, the provision of public improvements to stimulate private investment, assistance for acquisition, the disposition of public properties, the provision of community facilities and improvements to community facilities. (Eureka Tomorrow Project only)
- **Acquisition & Development Assistance.** The Agency will offer assistance for acquisition, assembly and development of properties that are vacant or underutilized and economically or commercially viable and reasonable.

- **Agency Assistance in the Provision of Public Improvements & Infrastructure.** The Agency will assist in the provision of public improvements (e.g., improvement or installation of water and sewer facilities, public spaces, streetscape amenities, etc.) which will enhance residential neighborhoods and existing commercial enterprises, support industrial operations, and stimulate private investment.
- **Street & Road Improvements.** The Agency will assist in the upgrading and reconstruction of streets which will lead to improved access to and traffic circulation within the area. These activities will reduce potential hazards and assist in promoting safe neighborhoods and commercial and industrial revitalization.

The goals, objectives, policies, and programs of the *Implementation Plan* go hand-in-hand with the financial program that the Agency administers to fund its operations.

Humboldt County General Plan

The *Humboldt County General Plan* and *Zoning Ordinance* regulate land use in the unincorporated Eureka Planning Area. Volume 1 of the Humboldt County General Plan is a framework plan that establishes countywide goals, policies, and standards for rural areas of the county. Volume II consists of numerous plans for urban areas of the county and for areas in the county within the Coastal Zone. Three plans contained in Volume II of the *Humboldt County General Plan* are wholly or partially contained in the Planning Area.

Eureka Community Plan: The Eureka Community Plan, which was updated in 1995, covers approximately 14.5 square miles of land area, extending from the Eureka city limits south to include College of the Redwoods and east to Ryan Creek. Existing land use includes residential, commercial, industrial, and resource-related uses. Approximately 12.5 square miles of the Eureka Community Plan area lie within the Eureka General Plan Planning Area. Approximately 45 percent of the entire Eureka Community Plan area is designated as Timber Production Zone (TPZ), 18 percent is prime agricultural land, and 37 percent is devoted to rural and urban use. Most residential use in the County's Eureka Community Plan Area is also contained in the City's Eureka General Plan Planning Area in five urban areas: West Myrtletowne, Pine Hill, Cutten, Ridgewood Heights, and Humboldt Hill. As of 1993, there were approximately 3,830 dwelling units and 10,800 persons in the Eureka Community Plan area, according to County estimates.

Freshwater Community Plan: The Freshwater Community Plan, adopted in May 1985, contains approximately 14.0 square miles of land area, extending from Ryan Creek east to include Freshwater and Kneeland and from the Coastal Zone Boundary south to Guptil Gulch. Approximately five square miles of the Freshwater Community Plan area lie within the Eureka General Plan Planning Area. The primary land use in this part of the Freshwater Community Plan area is commercial timber production, and most timber production land is designated as Timber Production Zone (TPZ). Residential uses in the Eureka General Plan Planning Area part of the Freshwater Community Plan area are concentrated near Myrtle Avenue and the Cumming Road area. Commercial uses are limited to the Indianola area.

Humboldt Bay Area Plan: The Humboldt Bay Area Plan, adopted in July 1989, extends from the Mad River south to Hookton Road and includes Arcata Bay, the Samoa Peninsula, South Humboldt Bay, and the South Spit. The area also runs inland to include the flood-prone bottomlands south of the Mad River, drainages at Freshwater Creek and Elk River, and Hookton Slough. All of this territory is located within the Coastal Zone Boundary. Approximately 13 square miles of the Humboldt Bay Area Plan area lie within the Eureka General Plan Planning Area. The primary land use in this part of the Humboldt Bay Area Plan area is agriculture and natural resources. Residential uses are concentrated adjacent to Eureka in Myrtletowne and Pine Hill. There are smaller residential areas in Manila, Spruce Point, King Salmon, and Fields Landing. Commercial uses are mainly located at Spruce Point, King Salmon, and Fields Landing. Industrial uses are located primarily on the Samoa Peninsula.

Murray Field Master Plan Report

Under various provisions of state law, cities and counties are required to either bring their general plans and any specific plans into compliance with the adopted County Airport Land Use Commission (ALUC) plan for the territory around designated airports or make specific findings. The purpose of the airport land use plan and the consistency requirement is to eliminate or minimize development around airports that would be subject to significant levels of aircraft noise or would pose a safety hazard to aircraft or occupants of the development in the event of a plane crash.

In January 1993, the Humboldt County ALUC adopted an Airport Land Use Commission Plan for each public use airport operated by Humboldt County. This included a plan for Murray Field, which is the only County airport in the Eureka General Plan Planning Area. As part of the plan, the ALUC established compatibility zone boundaries around each airport and developed a comprehensive land use plan and compatibility policies for areas within the compatibility zone boundaries. The ALUC plan divides the compatibility zones into five areas: 1) Runway Protection Zone or within Building Restriction Line; 2) Approach/Departure Zone and Adjacent to Runway; 3) Extended Approach/ Departure Zone; 4) Common Traffic Pattern; and 5) Other Airport Environs.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to evaluate impacts to urban land uses that would be expected to occur in Eureka's city limits. Impacts are assessed quantitatively based on information contained in the *Background Report* and the *Land Use Diagram*. The amount and location of development are based on the designations of the *Land Use Diagram* and the development estimates described in Chapter 2 of this *EIR*.

Assumptions

The following assumptions were made in assessing the impacts of the *General Plan's Land Use Designations*:

1. Development will occur consistent with the development estimates described in Chapter 2 of this *EIR*.
2. New urban development permitted by the City of Eureka will be contained within the city limits through the year 2010.
3. New development within the Planning Area outside the city limits will occur consistent with the Humboldt County plans for the area and, through the year 2010, under the jurisdiction of the County.

Thresholds of Significance

According to Appendix G of the *CEQA Guidelines*, a project will normally have a significant effect on the environment if it will conflict with adopted environmental plans and goals of the community where it is located, if it would divide or disrupt the physical arrangement of an established community, or if it would have a substantial, demonstrable negative aesthetic affect.

For the purposes of this *EIR*, the *General Plan* is assumed to have a significant impact if it would: (1) constitute a major change in land use policy for the City of Eureka, (2) divide or disrupt the physical arrangement of the community, or (3) have a substantial, demonstrable negative aesthetic affect.

IMPLICATIONS OF THE LAND USE DIAGRAM

Changes to Land Use and Land Use Planning in Eureka

The *General Plan* is a comprehensive update of the City of Eureka's 1977 *General Plan* and 1984 LCP *Land Use Plan*. The major policy objectives of the General Plan include the following:

- Revitalizing and creating a well-defined, concentrated Core Area (including parts of what had been defined variously as Downtown, Old Town, and the Waterfront) through a clear definition of an appropriately-sized core area for Eureka's size, a compact pattern of mutually reinforcing land use, and locating key public and private facilities in this Core Area.
- Encouraging new employment-generating development in Eureka to offset the decline of Eureka's and Humboldt County's decline in the traditional economic base (i.e., timber and fishing). Specifically, the Plan promotes the development of coastal-dependent industrial uses along the city's waterfront and reuse of vacant land in the Westside Industrial Area.
- Clearly defining the boundaries and role of outlying commercial areas to avoid further deterioration of Core Area commercial areas
- Protecting and conserving the open space resources in the city

This plan creates a more comprehensive framework for addressing these issues, generally building upon and refining policies of the previous General Plan and LCP Land Use Plan.

The *Housing Element* is not proposed to be updated in connection with this update, and consistency with the plan is discussed in the next section.

Humboldt County General Plan

Humboldt County is responsible for land use planning and regulation in the Planning Area outside the Eureka city limits. In the unincorporated part of the Planning Area, the designations on the *Land Use Diagram* closely follow those of the adopted Humboldt County plans (i.e., *Eureka Area Community Plan*, *Humboldt Bay Area Plan*, and *Freshwater Community Plan*). In preparing the *General Plan*, the City translated each of the County's designations into the City designation that most closely corresponds. The intent of this translation is to reflect as accurately as possible the County's intended regulations for the unincorporated area, using City General Plan land use designations.

Redevelopment Project Area Plans

The policies and activities described in the Redevelopment Agency's plans are generally consistent with the *Policy Document* of the *General Plan* and, as described above, the Agency relies on the City's General Plan for direction concerning land use and development prescriptions.

Murray Field Master Plan

Most of the land surrounding Murray Field is in the unincorporated Planning Area, and the *Land Use Diagram* designates the land as either Agricultural (A) or Natural Resource (NR), consistent with the County's *Humboldt Bay Area Plan*. Neither of these designations permits development at an intensity that would conflict with the operation of Murray Field or that is inconsistent with the *Murray Field Master Plan Report*.

GENERAL PLAN POLICY RESPONSE

The following *General Plan* policies and programs address the major issues concerning land use implications:

Land Use and Development Framework

- 1.A.1. *The City shall encourage infilling of vacant urban land and reuse of underutilized urban land within the Planning Area as its first priority of accommodating demand for growth.*
- 1.A.2. *The City shall work with Humboldt County to coordinate development decisions in unincorporated areas surrounding Eureka to ensure compatibility between the County's planning efforts and the City's efforts.*
- 1.A.3. *The City supports annexation as a positive means of city expansion but shall evaluate annexation proposals on a case-by-case basis. In reviewing these proposals, the City shall consider the questions listed in Table 1-3 (of the Policy Document). The City shall support only those annexations that:*
 - a. *Are broadly supported by affected residents and property owners*
 - b. *Are beneficial to the City*
 - c. *Promote orderly development and redevelopment of land within the city's sphere of influence*
 - d. *Promote efficiency in service delivery*
- 1.A.4. *To promote the public safety, health, and welfare, and to protect private and public property, to assure the long-term productivity and economic vitality of coastal resources, and to conserve and restore the natural environment, the City shall protect the ecological balance of the coastal zone and prevent its deterioration and destruction.*
- 1.A.5. *Within the coastal zone, the City shall ensure that coastal-dependent developments have priority over other developments on or near the shoreline. Except as provided elsewhere in this General Plan, coastal-dependent development shall not be sited in a wetland. Coastal-related developments shall generally be accommodated proximate to the coastal-dependent uses they support.*
- 1.A.6. *The City shall continue to work with the Humboldt Bay Harbor, Recreation, and Conservation District to implement the projects described in the City's Eureka Waterfront Revitalization Program and listed below:*
 - a. *Establishment of a comprehensive wetland management program that includes all of Eureka's restored and natural wetland areas.*
 - b. *Implementation of the PALCO Marsh Enhancement Plan.*
 - c. *Construction of a public access vista point at the foot of Truesdale Street.*
 - d. *Reconstruction of the Landing dock near the foot of C Street.*
 - e. *Design and construction of a public berthing facility in Inner Reach near the Adorni Center.*
 - f. *Development of a multi-use building between C and F Streets to house a Fisherman's- Farmer's Market and retail stores.*
 - g. *Development of Fisherman's Parcel for fishing fleet activities.*
 - h. *Rehabilitation of the existing small boat basin, dredging and expansion of the Humboldt Yacht Club, and development of a fishing industry support facility.*
 - i. *Completion of a waterfront bicycle/pedestrian trail from K Street to Del Norte Street.*
 - j. *Development of a Wetland Mitigation Bank as a comprehensive tool for mitigating the loss of wetlands to development.*
 - k. *Development of a facility for the Humboldt Bay Rowers Association near the Adorni Center.*

Core Area

- 1.B.1. The City shall promote the development of a compact Core Area of concentrated commercial, residential, fishing-related, civic, cultural, and recreational activities by unifying parts of the three historical central "districts" (i.e., Old Town, Downtown, and the Waterfront).
- 1.B.2. The City shall actively encourage, support, and provide incentives, where feasible, for the types of development it prefers in the Core Area, including the following:
 - a. Mixed-use projects.
 - b. Housing in upper stories of buildings.
 - c. Professional offices in upper stories of buildings.
 - d. Projects that reinforce viable existing uses, such as fisheries.
 - e. Projects that reinforce the identity of the Core Area.
- 1.B.3. The City shall promote development in areas immediately adjacent to the Core Area that support and complement Core Area uses.
- 1.B.4. The City shall promote the development of major public and private facilities that attract numerous patrons--such as a performing arts center, conference center, cinema, transit center, public market--within or directly adjacent to the Core Area where they have the maximum positive effect on the economic and social vitality of the Core Area. The City shall discourage development of these same uses outside the Core Area and directly adjacent areas.
- 1.B.5. The City shall promote the establishment and maintenance of pedestrian-oriented commercial uses such as retail stores, cafes, and restaurants along F Street and 2nd Street, particularly at the street level. The City shall encourage the establishment and maintenance of less pedestrian-oriented uses such as professional offices and multi-family residential uses on the upper floors of multi-story buildings.
- 1.B.6. The City shall explore the feasibility of closing 2nd Street between A and B Streets and locating a permanent public market or similar active public use (e.g., Pike Street Market in Seattle) adjacent to the proposed intermodal transportation center. This would provide a major public facility and visitor-oriented landmark at the west end of the retail section of 2nd Street and create a line of demarcation between the Core Area and the light industrial area to the west.
- 1.B.7. The City shall attempt to maximize the effectiveness of public sector investment by concentrating on a limited number of strategically-located, mutually-reinforcing, highly-visible projects that will stimulate private-sector investment.
- 1.B.8. The City shall work with local banks to develop public sector-private sector funding programs for retrofit and rehabilitation of unreinforced masonry buildings in the Core Area.
- 1.B.9. The City shall encourage economic investment in buildings, ranging from modest signage improvements and new paint, to major facade improvements, remodels, and new buildings.
- 1.B.10. The City shall use unified landscaping and streetscape elements (i.e., streetlights, seating, signage, banners) to create a single Core Area identity and to unify the three historical central "districts" (i.e., Old Town, Downtown, and the Waterfront.)
- 1.B.11. The City shall encourage and provide incentives, where feasible, for retrofit and rehabilitation of unreinforced masonry buildings in the Core Area that pose an earthquake risk.

- 1.B.12. The City shall discourage development at the western edge of the Core Area that could erode the economic viability of industrial uses in the adjacent light industrial area. This includes discouraging uses in the Core Area that would prompt significant increases in property values that would in turn lead to displacement of adjacent or nearby light industrial uses.
- 1.B.13. The City shall cooperate with Humboldt County in an effort to relocate the County's 2nd and J Street facilities that are no longer appropriate for the Core Area. The sites should be redeveloped for visitor-accommodations and residential uses. The City shall consider providing incentives to the County where feasible and appropriate for such relocation.
- 1.B.14. The City shall encourage and provide incentives, where feasible, for the relocation of privately-owned industrial facilities that are no longer appropriate for the Core Area.
- 1.B.15. The City shall discourage the development or continued operation of facilities that promote the concentration of homeless or transients in the Core Area. The City supports the establishment of these facilities in the Eureka area outside of the Core Area.
- 1.C.1. The Core Area shall be the City's first choice in siting or relocating new cultural facilities, museums, and performing or visual arts facilities. The City shall promote the development of a cultural arts/theater district within the Core Area that focuses primarily on the F Street Corridor.
- 1.C.2. The City shall provide leadership and support for creating a performing arts complex near the Eureka Theater and Carnegie Library.
- 1.C.3. The City shall participate in studies to determine the feasibility of renovation of other cultural facilities, such as the Ingomar Theater.
- 1.C.4. The City shall encourage the interim use of empty stores in the Core Area as temporary (phantom) art galleries.
- 1.C.5. The City shall support rehabilitation and conversion of vacant upper floors of buildings in the Core Area as artist live-work spaces.
- 1.C.6. The City shall develop an active program for providing public art.
- 1.C.7. The City shall encourage and assist in the development of murals to enliven blank walls in the Core Area.
- 1.D.1. The City shall retain the historic waterfront building scale, building form, and general character in waterfront revitalization and development as a means of creating a "Victorian Seaport" identity for the waterfront area. New buildings developed along the waterfront north of First Street/Waterfront Drive should not exceed three stories or 50 feet in height.
- 1.D.2. Except for safety reasons in industrial operations, the City shall ensure public access along the full length of the shoreline within the Core Area through development of multiple access points such as walkways, paths, docks, and piers.
- 1.D.3. The City shall promote the continued operation of existing fisheries and fisheries-related industry throughout the Core Area waterfront.
- 1.D.4. The City shall encourage expansion of the fisheries industry west of C Street in the Core Area.

- 1.D.5. *The City shall expand and enhance opportunities for recreational and visitor-serving uses and activities along the waterfront, including visitor accommodations, boating facilities, water transportation, fishing, and other similar attractions.*
- 1.D.6. *The City shall encourage expansion of the F Street pier into a major facility that focuses and anchors waterfront public access and open space.*

In combination with the General Plan Land Use Diagram, and the policies and programs of other sections of the *Policy Document*, these policies and programs seek to guide growth in an orderly pattern consistent with Eureka's overall economic, social, and environmental needs, including those expressed in the plans of Humboldt County, the Eureka Redevelopment Agency, and the Humboldt County Airport Land Use Commission.

IMPACTS

The *General Plan* designates land within the city limits to accommodate development through the year 2010. The rate at which vacant land within the city limits is developed will largely be determined by market forces. This *EIR* does not envision the need for any specific annexations to the city. The *General Plan* generally builds upon the existing land use framework, and includes numerous policies to preserve and enhance Eureka's community character as new development occurs.

Development under the *General Plan* would not disrupt or substantially alter the overall physical arrangement of the community, and is generally consistent with goals and objective of local and regional plans. Its impact is, therefore, considered less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the *General Plan* are necessary.

3.2 HOUSING AND POPULATION

ENVIRONMENTAL SETTING

The existing housing and population characteristics of the City of Eureka are summarized in Chapters 2 and 3 of the *General Plan Background Report* and the *Housing Element*. Chapter 2 of this *EIR* summarizes projected growth under the *General Plan* within the city limits.

Eureka Housing Element

Housing supply and other housing issues within the city of Eureka are discussed in detail in the City's *Housing Element*, which was adopted in December 1995. Because the City devoted extensive recent effort to updating and adopting the *Housing Element*, it is not being revised as part of this comprehensive General Plan Update. It will, however, be printed as part of the *General Plan Policy Document* following adoption of the updated General Plan and is available under separate cover for review and information.

METHODOLOGY

Assumptions

1. New housing, population, and employment growth will occur consistent with the development estimates in Chapter 2 of this *EIR*.

2. The City will update the *Housing Element* in accordance with statutory requirements.

Thresholds of Significance

According to the State *CEQA Guidelines*, a project will normally have a significant impact on housing if it will affect the existing supply of housing or create a demand for more housing. The *CEQA Guidelines* also assume a project could have adverse impacts on population if it has the potential to substantially alter the location, distribution, density or growth rate of the population of an area.

For the purposes of this *EIR*, the *General Plan* is considered to have a significant impact if adoption or implementation of the plan would create a demand for more housing without providing for accompanying housing development or if it would be inconsistent with the City's adopted *Housing Element*. This *EIR* also considers it a significant impact if the *General Plan* would limit housing development substantially below forecasted growth, as it would thereby require other jurisdictions in the region to accommodate this growth.

IMPLICATIONS OF THE LAND USE DIAGRAM

Housing and Population Growth

The City of Eureka was estimated to have a population of approximately 27,500 and a total of about 12,000 housing units as of January 1996, with an additional 20,000 to 25,000 residents in unincorporated areas of the Planning Area. As Table 2-2 in Chapter 2 of this *EIR* indicates, the *Land Use Diagram* provides for new development of approximately 870 units within the existing city limits, estimated to accommodate an additional 1,500 residents.

Indirect impacts of housing construction may result from increased traffic, the loss of valuable natural resources such as wildlife habitat, and the increase in demand for public services and facilities. The secondary and tertiary impacts resulting from the designation of additional land for housing are discussed in the appropriate corresponding sections of this *EIR*.

Jobs to Housing Issues

Declines in traditional employment industries in Eureka have resulted in declines in the employment base, and associated declines in citywide population. The *Land Use Diagram* designates additional land for commercial and industrial development. Market forces will largely determine the rate at which employment growth occurs in Eureka, although the City will continue to promote economic development. Land uses designated on the *Land Use Diagram* provide the opportunity for Eureka to have a better employment base and improve its jobs-housing balance and reduce commuting outside of Eureka. According to the development estimates prepared for the *EIR*, vacant and underdeveloped commercial and industrial land within the city limits could accommodate an estimated 4,448 new employees.

Consistency with Eureka's Housing Element

The *General Plan* refined the analysis of the number of sites available to accommodate housing within the city limits, identifying additional sites to accommodate approximately 30 more units than the *Housing Element* estimated could be accommodated within the city, most of which are located on surplus Caltrans properties.

GENERAL PLAN POLICY RESPONSE

The *General Plan*, in conjunction with the adopted *Housing Element*, include policies and programs to offset the adverse housing-related impacts associated with the *Land Use Diagram*. Relevant housing-related *General Plan* policies and programs include the following:

Core Area Residential Community

- 1.F.1. The City shall promote expansion of the housing stock on the upper floors of multi-story buildings in the Core Area through rehabilitation, conversion, and infill.
- 1.F.2. The City shall promote a mix of housing types and costs in the Core Area, including market-rate, moderate- and low-income, and artist work-live space. The City shall assist, where feasible, development of low- and very-low-income housing in the Core Area.
- 1.F.3. The City shall encourage the development of both rental and for-sale housing in the Core Area.
- 1.F.4. The City shall support development of residential-serving services in the Core Area, such as neighborhood markets.
- 1.F.5. To increase the feasibility of residential development in the Core Area, the City shall consider reducing parking requirements for Core Area housing.

Residential/Neighborhood Development

- 1.K.1. The residential environment of Eureka should be guided by the following neighborhood development principles.
 - a. Neighborhoods should contain a diversity of housing types to enable citizens from a wide range of economic levels and age groups to live within its boundaries.
 - b. Neighborhoods should have a center focus that combines commercial, civic, cultural and recreational uses.
 - c. Neighborhoods should contain an ample supply of specialized open space in the form of squares, greens and parks whose frequent use is encouraged through placement and design.
 - d. Public spaces should be designed to encourage the attention and presence of people at all hours of the day and night.
 - e. Streets, pedestrian paths, and bike paths should contribute to a system of fully-connected, interesting routes to all destinations. Their design should encourage pedestrian and bicycle use by being small and spatially defined by buildings, trees and lighting, and by discouraging high speed traffic.
 - f. Wherever feasible, the natural terrain, drainage and vegetation of the neighborhood should be preserved with superior examples contained within parks or greenbelts.
 - g. Neighborhood design should help conserve resources and minimize waste.
 - h. Neighborhoods should provide for the efficient use of water through the use of natural drainage, drought tolerant landscaping, and recycling.
 - i. New neighborhoods should be developed so that street orientation, the placement of buildings, and the use of shading should contribute to the energy efficiency of the neighborhood.
- 1.K.2. The City shall promote the individuality and identity of each neighborhood while at the same time upgrading the overall environment through excellence of architecture, design, landscaping, retention of views, and street furniture.
- 1.K.3. The City should encourage retention of neighborhood convenience shopping that is compatible with the overall circulation and land use pattern so as to provide convenience for residential areas.
- 1.K.4. The City shall ensure that infill development (either new or rehabilitated residential structures) is compatible with the overall established character of residential neighborhoods.
- 1.K.5. The City shall encourage higher residential densities at locations where convenient access and adequate facilities, including parks and open space, are readily available.

- 1.K.6. *The City shall encourage higher residential densities in the Core Area and in neighborhoods where existing and planned community facilities and utilities are designed to handle increased densities.*
- 1.K.7. *The City shall encourage rural and estate densities and planned unit developments in areas immediately adjacent to gulch greenways so as to preserve the openness and visual amenities of these valuable natural assets while reducing sprawl conditions and the cost of utilities, circulation, grading, and construction.*

IMPACTS

The *General Plan* provides land in a range of residential densities to accommodate housing and population growth through 2010. Ultimately, market forces will be the major factor determining the level of employment growth, although City policies and actions can assist in attracting and retaining businesses. Through the policies of the *General Plan*, the City seeks to provide adequate opportunity to meet the prospective needs of new commercial and industrial development. In addition, the *Policy Document* allows for annexation of additional lands if and when needed to accommodate additional residential land and if the annexations meet the criteria outlined in the *Policy Document*.

The *General Plan* is consistent with and builds upon the adopted *Housing Element* and provides the opportunity for a better balance of jobs to housing within the city limits. The housing and population-related impacts of the *General Plan* are, therefore, considered less-than-significant.

Among the indirect effects associated with housing and population growth are increased traffic with associated air quality impacts, and increased demand for public services and facilities. These indirect effects are discussed in subsequent chapters of the *EIR*.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs included in the *General Plan* and the *Housing Element* are necessary.

CHAPTER 4

TRANSPORTATION AND CIRCULATION

This chapter discusses Eureka's transportation system and services, including streets and roads, parking, public transit, rail service, port activities, and air transportation. Eureka's location as a significant port as well as a tourist destination city means that a wide variety of transportation modes are important to different segments of the population and different segments of the economy

4.1 STREET AND ROADWAY SYSTEM

ENVIRONMENTAL SETTING

Chapter 6 of the *General Plan Background Report* describes the existing street and roadway system and conditions. Eureka's circulation system, basically unchanged for decades, is dominated by a grid-street network, with U.S. 101 operating as two one-way streets as it bisects the city's downtown. U.S. 101 provides the major links from Eureka to the Oregon coast to the north and the San Francisco Bay Area to the south.

Route 101 in both the Broadway and 4th/5th couplet is the focus of the majority of traffic congestion in the city. Other roadway segments in the Planning Area are relatively uncongested except for very short periods in selected locations, such as around schools at the beginning and end of the school day. In comparison with other California cities, the overall level of service provided by Eureka's street and highway system is very high.

METHODOLOGY

The basis for the analysis in this section is the *City of Eureka Citywide Circulation Study*, (TJKM Transportation Consultants, April 6, 1990). The findings of that study were confirmed and validated for use in the update of the General Plan and this EIR.

Functional Classification

The *Circulation Diagram* (Figure 4-1) depicts the proposed freeway, arterial, and collector roadway system for the Planning Area. The proposed system differs from the present system only in the addition of Waterfront Drive as a new minor arterial street between Washington Street and Herrick Road. Table 4-1 describes the basic character of the roadway types shown in Figure 4-1, while Table 4-2 lists the facilities within Eureka that fall into each classification and Table 4-3 specifies cross-section standards for each type of road.

TABLE 4-1
STREET AND HIGHWAY CLASSIFICATION SYSTEM

STREET TYPE	FUNCTION	ACCESS	AVERAGE DAILY VOLUME	COMMENTS
Freeways	Provides for intra- and inter-regional mobility	Restricted to arterials and freeways via interchanges	Up to 160,000	US 101 south of Sunset and State Route 255 north of the railroad are the only freeways in the area.
Expressway	Provides for intra- and inter-regional mobility	Limited to key intersections.	Varies	US 101 east of the city is an expressway
Major Arterials	Collect and distribute traffic from freeways to collector streets and visa versa	Access is currently from all connecting intersections and numerous driveways. Future planning should minimize and/or consolidate driveways.	Up to 40,000	Major arterials are separated from minor arterials by the relative importance of service to through traffic.
Minor Arterials	Collect and distribute traffic from freeways and to collector streets and visa versa	Access from all connecting intersections and numerous driveways. Driveways should be minimize and/or consolidated driveways. New driveways should be no closer than 100 feet from an intersection.	Up to 40,000	See above
Collectors	Serve as connectors between local and arterial streets and provide direct access to parcels.	At major intersections, driveways should be no closer than 50 feet to the intersection. Non-residential driveways and/or intersecting streets should be no closer than 300 - 400 feet apart.	Up to 12,000	Typical spacing: 1/4 mile.
Local Streets	Provide access to parcels.	Access is not restricted.	Up to 5,000	Largest part of the circulation system.

TABLE 4-2

ROADWAY CLASSIFICATIONS

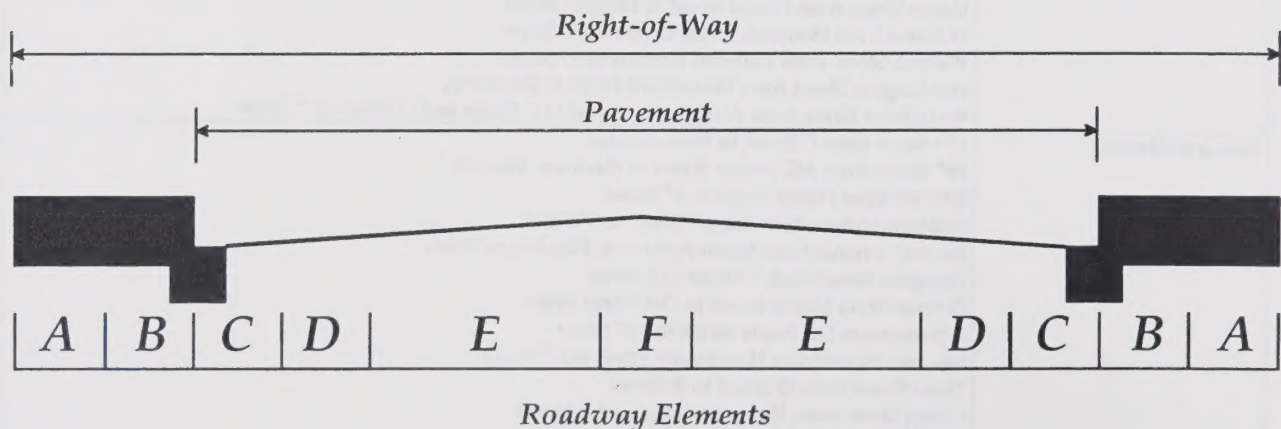
ROADWAY CLASS	ROADWAY SEGMENT
Freeways	US 101 South of Elk River Interchange SR 255 north of 3 rd Street
Expressways	US 101 east of Y Street
Major Arterials	Broadway from Elk River Interchange to 4 th Street Fifth Street from Broadway to Y Street Fourth Street from Y Street to Broadway H Street from 4 th Street to Harris Street Harris Street from Broadway to Harrison Avenue Henderson Street from I Street to Broadway I Street from Harris Street to 4 th Street Myrtle Avenue from 5 th Street to Harrison Avenue West Avenue/V Street from 4 th Street to Myrtle Avenue
Minor Arterials	14 th Street from Broadway to West Avenue Campton Road from Oak Street to Walnut Drive Dolbeer Street from Harris Street to Hemlock Street E Street from 1 st Street to Harris Street F Street from Henderson Street to Oak Street Fairway Drive from Ridgcrest Drive to Herrick Road H Street from Harris Street to Oak Street Harris Street from Broadway to Hall Avenue Harrison Avenue from Harris Street to Myrtle Avenue Hemlock Street from Walnut Drive to Dolbeer Street S Street from County Lane to Harris Street Seventh Street from Broadway to Myrtle Avenue Sixth Street from Myrtle Avenue to Broadway Wabash Street from Railroad Avenue to H Street West Avenue from Myrtle Avenue to County Lane New North-South Roadway connecting Fairway Drive to Ridgewood Drive
Major Collectors	14 th Street from Railroad Avenue to Broadway Allard Avenue from Glen Street to Spring Street Buhne Street from Fairfield Street to Harrison Avenue Del Norte Street from E Street to P Street Fairfield Street from Harris Street to Wabash Avenue First Street from C Street to H Street Glen Street from Harris Street to Allard Avenue Hemlock Street from W Street to Walnut Drive Hodgson Street from S Street to W Street McCullens Avenue from Broadway to Utah Street S Street from Harris Street to Hodgson Street Silva Avenue from Spring Street to Union Street Union Street from Harris Street to Higgins Street W Street from Hodgson Street to Hemlock Street Wabash Street from Railroad Avenue to H Street Washington Street from Waterfront Drive to Broadway Waterfront Drive from Washington Street to C Street and H Street to T Street
Minor Collectors	17 th Street from P Street to West Avenue 18 th Street from MC Farlan Street to Harrison Avenue B Street from Harris Street to 6 th Street California Street from Harris Street to 6 th Street Central Avenue from South Avenue to Henderson Street Hodgson Street from F Street to S Street O Street from Harris Street to Del Norte Street P Street from Del Norte Street to 14 th Street Summer Street from Hawthorne Street to 5 th Street Third Street from O Street to X Street Union Street from Harris Street to Cedar Street Utah Street from Allard Avenue to South Avenue

TABLE 4-3
MINIMUM CROSS-SECTION STANDARDS

FACILITY	ROADWAY CROSS-SECTION ELEMENT							
	A Sidewalk (Each Side)	B Parkway ¹ (Each Side)	C Parking (Each Way)	D Bicycle Lane ² (Each Way)	E Travel Lanes (Each Way)	F Median	Pavement Width	Right-of- Way
Six-Lane Arterial	6	4	8	5 ³	33	15	107	127
Four-Lane Major Arterial	6	4	8	5 ³	2	15	85	105
Four-Lane Minor Arterial	6	4	8	5 ³	22	11	81	101
One-Way	6	4	16 ⁴	5 ³	34	0	55	75
Major Collector	6	4	8	5	12	0	50	70
Minor Collector	6	4	0	5	12 ⁵	0	38	58
Local with Parking	6	4	8	0	11	0	38	58
Local without Parking	6	4	0	0	14	0	28	48
Rural Local	0	0	0	0	11	0	22	58 ⁶

¹Parking strip is encouraged, but not required.²Where included on Bikeway Plan.³Note: Bicycle lanes are not recommended to be placed on arterial streets unless alternative routes do not exist.⁴16 feet for parking on both sides.⁵If no bike lane, travel lane must be 14 feet.⁶Includes unpaved shoulder.

ROADWAY CROSS-SECTION ELEMENTS
(as referenced in Table 4-3)





Traffic Forecasting Model

The consultants responsible for preparing the *Citywide Circulation Study*, prepared a computer tool known as a "forecasting model." The model is used to forecast traffic volumes on all of the arterial and collector streets and freeways in the Eureka area. The model was used to forecast future conditions for the *Citywide Circulation Study* as well as the follow-up *Eureka Community Plan* for Humboldt County. The City's General Plan Consultants have used this model to evaluate impacts on the roadway system for this *EIR*. The model contains a computerized representation of the city's street and highway system together with data quantifying existing land use data. This information is used together with travel model parameters to produce a forecast of average daily traffic on the major streets and highways in the city. For the purposes of this *EIR*, the model was used to project two future scenarios. Both of the scenarios are targeted to the year 2010.

Future Baseline Scenario: The first scenario has been labeled as the "Future Baseline" scenario. It is intended to represent the conditions that would occur in Eureka in 2010 if no new development within the city limits occurred and no roadway improvements were made. In essence, this scenario examines the effects of increases in traffic on Eureka streets from growth in the region. The "Future Baseline" scenario was created by starting with the land use data and the highway network created for the original 1990 *Citywide Circulation Study*. No changes to the highway network were made to the 1990 network for this baseline scenario. Estimates of new development potential outside the city were based on the increments assumed in the *Eureka Community Plan* for Humboldt County in 1992. In addition, the General Plan Consultants made estimates regarding increases in through-traffic on U.S. 101. A review of California State Department of Finance population growth forecasts in the counties on the U.S. 101 corridor combined with a trend analysis of traffic growth on U.S. 101 over the past 14 years lead to an estimate that through traffic should double between 1995 and 2010. (Note that population growth statistics suggest a lower growth rate, while the trend analysis would have lead to an increase of 175 percent. The 100 percent growth is an average of these two indicators.)

General Plan Scenario: The second scenario assumes new development in the city limits as described in Chapter 2 of this *EIR* and assumes the construction of the extension of Waterfront Drive from its current Washington Street terminus to Herrick Road.

Levels of Service

To measure operating conditions of the roadway system, future traffic on the proposed transportation system was evaluated in terms of level of service (LOS). Levels of service vary qualitatively from "A" (the best) to "F" (the worst). The *Citywide Circulation Study* compared existing segment volumes on the major arterial streets in the city to their theoretical capacity to determine the volume/capacity ratio. Theoretical peak hour capacities for the roadway segments are documented in Table 4-4.

TABLE 4-4		
MIDBLOCK ROADWAY SEGMENT PLANNING CAPACITIES		
Facility Type	Peak Hour Capacities	
	LOS C	LOS E
2-lane residential or rural roadway with rolling terrain	800	1,000
2-lane collector or rural roadway	1,000	1,250
2-lane arterial, light side friction	1,400	1,750
3-lane arterial, one-way flow, light side friction	1,700	2,100
4-lane undivided arterial	2,000	2,500
4-lane divided arterial	2,400	3,000
6-lane divided arterial	3,000	4,500

The 1990 *Citywide Circulation Study* identified roadway segments exceeding LOS C planning capacity. These included:

- Broadway from downtown to Harris Street
- 4th and 5th Streets from M to V Street
- Myrtle Avenue from West Avenue to Harrison Avenue

Thresholds of Significance

For purposes of this *EIR*, an impact is considered significant if the projected level of service at year 2015 on an existing or proposed roadway would deteriorate below the service levels standards of the *General Plan*, as laid out in Policy 3.A.2, as follows:

- 3.A.2. *The City shall endeavor to manage its street and highway system so as to maintain Level of Service C operation on all roadway segments, except for any portion of U.S. 101, where Level of Service D shall be acceptable. For evaluation purposes, service levels shall be determined on the basis of midblock roadway planning capacities shown in Table 3-3 (of the Policy Document) and the definitions of service levels shown in Table 3-4 (of the Policy Document).*

IMPLICATIONS OF THE LAND USE DIAGRAM

Future Baseline Scenario

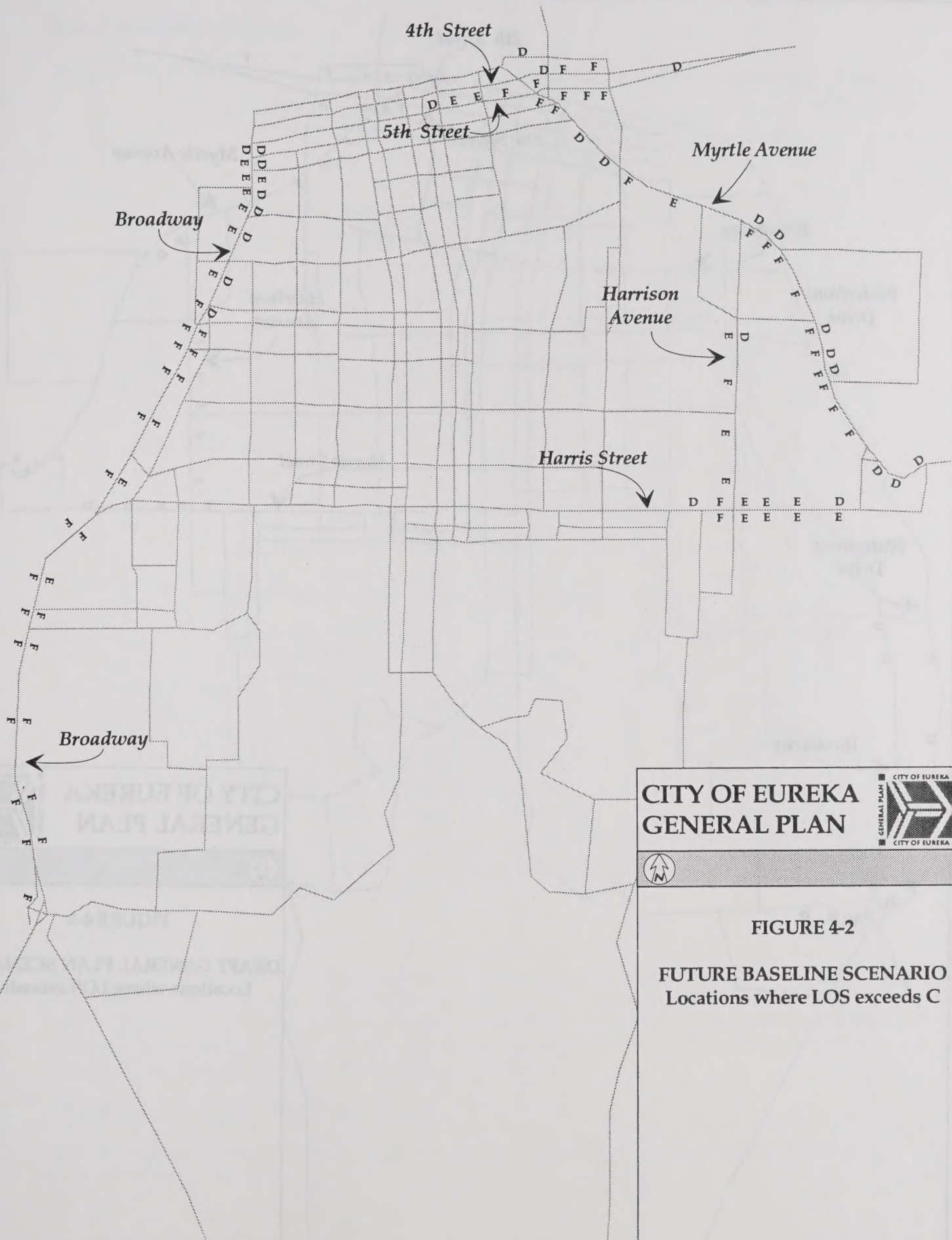
Figure 4-2 illustrates the locations in the city where traffic volumes would exceed Level of Service C from future development in the region outside the city limits, assuming no new development and no roadway improvements in the city limits. Figure 4-2 indicates that much of Broadway is projected to operate at Service Level F, and that the two-lane portion of Fifth Street is also projected to operate at LOS F, as is 4th Street east of U.S. 255. Myrtle Avenue, Harris Street, and Harrison Avenue are also projected to operate at Levels D and F.

General Plan Scenario

Figure 4-3 shows projected service level conditions based on development within the city limits (as described in Chapter 2 of this *EIR*) and construction of the circulation system improvements (i.e., the addition of Waterfront Drive extension). The Waterfront Drive extension would bring the entire Broadway corridor within Level of Service C. Waterfront Drive itself would operate in the LOS C and D range, although since there is sufficient reserve capacity on Broadway, the Waterfront Drive locations showing LOS D could probably operate at LOS C, depending on just how traffic allocates itself between the two parallel routes.

Service levels on other Eureka streets generally are not changed notably between the Future Baseline Scenario and the General Plan Scenario. Some additional traffic is projected on Myrtle Avenue, leading to deteriorated operating conditions. Because Myrtle Avenue is currently built within its right-of-way, no widening can be made without significant impacts on adjoining properties; for these reasons, it was not considered feasible to propose a major widening project on Myrtle Avenue.

Tables 4-5 through 4-8 depict the systemwide changes in service level for the entire Planning Area. Tables 4-5 and 4-6 document the level of service on major facilities tabulated according to miles of street and by vehicle miles traveled (VMT) for the Future Baseline Scenario. Tables 4-7 and 4-8 document the same data for the *General Plan* scenario and compare these changes with the Future Baseline Scenario. Tables 4-7 and 4-8 show that overall, the level of service will improve throughout the city under the General Plan Scenario, compared to the Future Baseline Scenario. This means that the construction of the Waterfront Drive

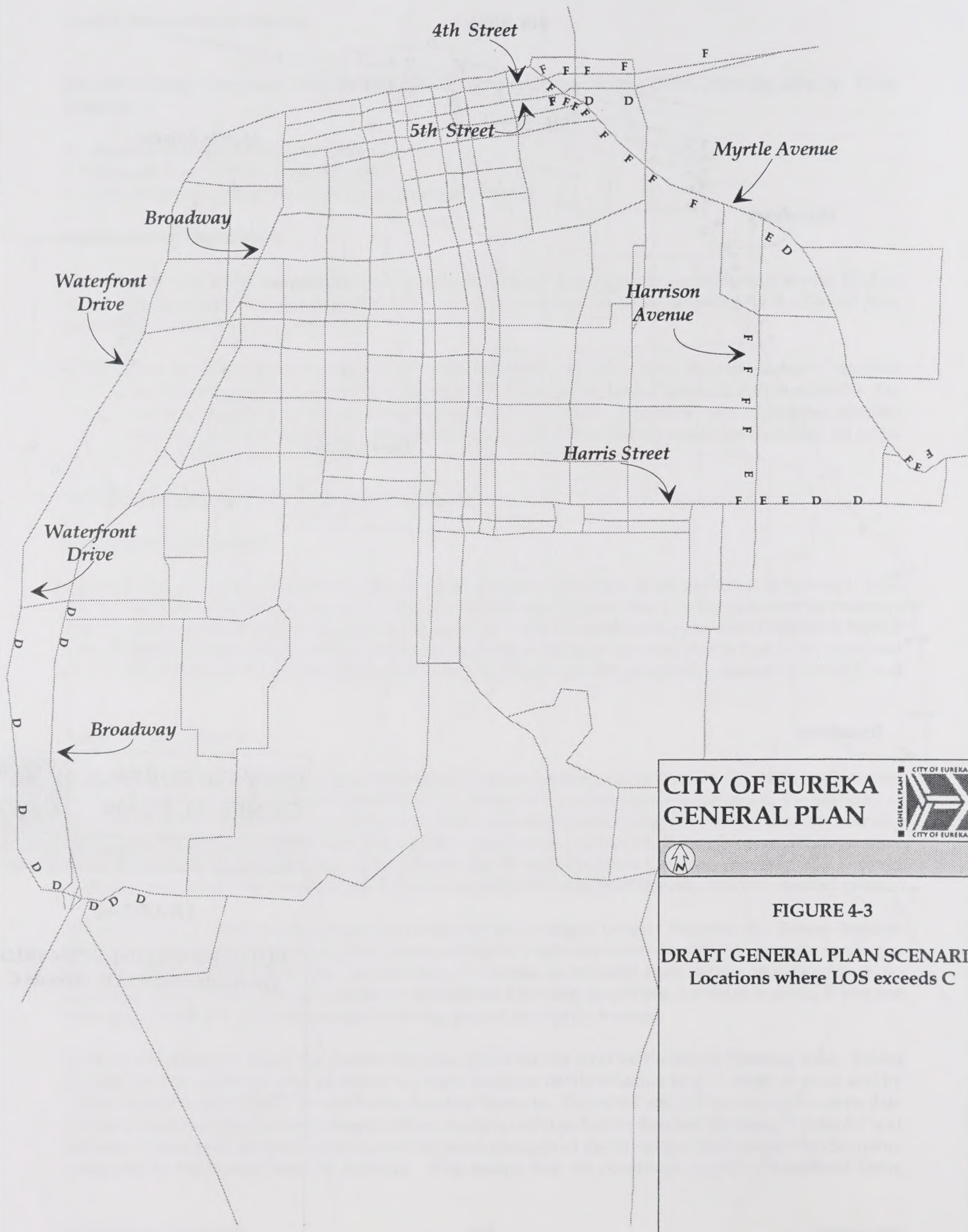


**CITY OF EUREKA
GENERAL PLAN**



FIGURE 4-2

**FUTURE BASELINE SCENARIO
Locations where LOS exceeds C**



**CITY OF EUREKA
GENERAL PLAN**

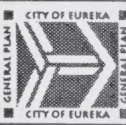


FIGURE 4-3

DRAFT GENERAL PLAN SCENARIO
Locations where LOS exceeds C

extension will address regional traffic impacts beyond that associated with new development within the city of Eureka.

TABLE 4-5
FUTURE BASE CASE SCENARIO
TABULATION OF SEGMENT LENGTH
(In Miles)

Facility	Level of Service						Total
	A	B	C	D	E	F	
Freeway	2.77	0.00	0.00	0.00	0.00	0.05	2.82
Expressway	0.00	0.30	0.00	0.30	0.00	0.00	0.60
Major Arterial	0.70	0.78	0.35	0.55	0.74	2.80	5.92
Minor Arterial	14.56	1.56	2.88	0.99	0.79	2.83	23.61
Total	18.03	2.64	3.23	1.84	1.53	5.68	32.95
% of Total	54.7%	8.0%	9.8%	5.6%	4.6%	17.2%	100.0%

Source: Dowling Associates, 1996

TABLE 4-6
FUTURE BASE CASE SCENARIO
TABULATION OF VEHICLE MILES TRAVELED (VMT)

Facility	Level of Service						Total
	A	B	C	D	E	F	
Freeway	100,771	0	0	0	0	2,052	102,823
Expressway	0	11,756	0	15,111	0	0	26,867
Major Arterial	9,017	12,084	5,701	13,403	20,376	93,395	153,976
Minor Arterial	78,429	15,426	26,841	11,851	10,684	41,565	184,796
Total	188,217	39,266	32,542	40,365	31,060	137,012	468,462
% of Total	40.2%	8.4%	6.9%	8.6%	6.6%	29.2%	100.0%

Source: Dowling Associates, 1996

TABLE 4-7
GENERAL PLAN SCENARIO
TABULATION OF SEGMENT LENGTH
(In Miles)

Facility	Level of Service						Total
	A	B	C	D	E	F	
Freeway	2.53	0.29	0.00	0.00	0.00	0.00	2.82
Expressway	0.30	0.00	0.00	0.00	0.00	0.30	0.60
Major Arterial	2.68	1.68	0.77	0.34	0.00	0.44	5.91
Minor Arterial	18.15	2.13	2.44	0.94	0.23	3.14	27.03
Total	23.66	4.10	3.21	1.28	0.23	3.88	36.36
% of Total	65.1%	11.3%	8.8%	3.5%	0.6%	10.7%	100.0%
Difference from Future Baseline Scenario	10.4%	3.3%	-1.0%	-2.1%	-4.0%	-6.6%	

Source: Dowling Associates, 1996

TABLE 4-8
GENERAL PLAN SCENARIO
TABULATION OF VEHICLE MILES TRAVELED (VMT)

Facility	Level of Service						Total
	A	B	C	D	E	F	
Freeway	85,816	14,196	0	0	0	0	100,012
Expressway	10,604	0	0	0	0	18,231	28,835
Major Arterial	37,829	29,530	15,868	5,888	0	12,015	101,130
Minor Arterial	75,585	16,954	22,324	9,899	2,732	57,350	184,844
Total	209,834	60,680	38,192	15,787	2,732	87,596	414,821
% of Total	50.6%	14.6%	9.2%	3.8%	0.7%	21.1%	100.0%
Difference from Future Baseline Scenario	10.4%	6.2%	2.3%	-4.8%	-6.0%	-8.1%	

Source: Dowling Associates, 1996

Average daily traffic plots have been prepared for both scenarios and are available for review at the City of Eureka Engineering Department; these plots are too large to be reproduced at a scale suitable for inclusion in this document but are available as a reference.

Safety Evaluation

Traffic safety is an issue that is always of concern to the citizens of a community, and issues of this type are dealt with on a daily basis by the City's Traffic Engineer. Traffic safety is usually not an issue to be dealt with in the context of a General Plan. Safe designs are implicit in the street cross-sections and other design elements. Issues such as speed limits and the location of stop signs and traffic signals are generally considered implementation actions in response to other City policies.

GENERAL PLAN POLICY RESPONSE

The following *General Plan* policies and programs address the effects of future development on the street and roadway system.

Streets and Highways

- 3.A.1. *The City shall expand and maintain its streets and highway system according to the classifications shown in Table 3-1 and depicted in Figure 3-1.*
- 3.A.2. *The City shall endeavor to manage its street and highway system so as to maintain Level of Service C operation on all roadway segments, except for any portion of U.S. 101, where Level of Service D shall be acceptable. For evaluation purposes, service levels shall be determined on the basis of midblock roadway planning capacities shown in Table 3-3 and the definitions of service levels shown in Table 3-4.*
- 3.A.3. *The City shall require that all new and improved streets in Eureka be designed in accordance with the roadway cross-sections standards shown in Table 3-5.*
- 3.A.4. *The City shall employ methods approved by the California Vehicle Code and Traffic Manual to establish speed limits.*
- 3.A.5. *The City shall continue to pursue all available options for funding new and improved street and highway facilities.*
- 3.A.6. *The City shall require all new land development projects to contribute a fair share of the cost of any street and highway improvement that can be assigned to the traffic-generating attributes of the new or intensified uses. Any project that is expected to generate more than 50 trips per peak hour shall be required to submit a traffic analysis prior to approval. Any project that is anticipated to generate significant traffic impacts will be required to mitigate such impacts.*
- 3.A.7. *The City should improve the appearance of existing transportation rights-of-way and incorporate high standards of aesthetic design when considering new transportation corridors, including streets, bikeways, walkways, and other related rights-of-way.*
- 3.A.8. *The City shall develop Waterfront Drive along Humboldt Bay from the Elk River Interchange to the vicinity of Eureka Slough, consistent with all other applicable General Plan and LCP policies.*
- 3.A.9. *The City shall require that streets developed in hilly and gulch greenway areas result in as little disruption of the natural topography as feasible. New roads should not be constructed gulch greenway areas unless there is no feasible, less environmentally damaging alternative and the impacts can be adequately mitigated.*
- 3.A.10. *The City shall work with the Humboldt County Association of Governments (HCAOG), Caltrans, and Humboldt County to continue reviewing options for long-term solutions to congestion on U.S. 101, including development of some type of higher order facility (e.g., freeway or expressway).*
- 3.A.11. *The City shall require that new residential streets be developed to the minimum width consistent with safety and emergency access considerations and on-street parking needs.*
- 3.A.12. *The City shall endeavor to implement traffic controls at uncontrolled intersections that have created traffic conflicts and led to traffic accidents.*
- 3.A.13. *The City shall require that all new structures constructed adjacent to expressways, arterial streets, and collector streets in the city be situated so as to conform with the sight distance requirements defined in the California Department of Transportation (Caltrans) Highway Design Manual. The City shall also ensure that new roadways are designed to conform with the sight distance requirements in the Highway Design Manual.*

- 3.A.14. The City shall require all new or intensified development projects to provide sufficient off-street parking supply so as to conserve the existing on-street supply, particularly in the commercial, medical services commercial, industrial, and higher density residential areas, except in the Core Area as specified under Goal 3.H in this document. In cases where off-street parking is required, the City will encourage joint-use parking arrangements.

Core Area Circulation

- 3.H.2. The City shall balance north-south travel needs through the Core Area (i.e., along E, F, and G Streets) with east-west travel needs by modifying traffic control devices (i.e., traffic signals and stop signs), working with Caltrans as necessary.

Implementation Programs

- 3.1 The City shall complete a study of the feasibility of acquiring the right-of-way for completing construction of Waterfront Drive from Eureka Slough to Del Norte Street.
- 3.2 The City shall undertake a design and right-of-way study for construction of Waterfront Drive from Del Norte Street to the Elk River interchange.
- 3.3 The City shall undertake a design and right-of-way study for construction of Henderson Street between Waterfront Drive and Broadway.
- 3.4 The City shall request Caltrans to investigate possibilities for upgrading the Myrtle Avenue/Fourth Street/Fifth Street intersections to provide for a safer, more efficient flow of traffic. This should include signalization of R Street/Fifth Street.
- 3.5 The City shall develop and implement a systematic program for implementing traffic controls at uncontrolled intersections that have created circulation conflicts and led to traffic accidents.
- 3.6 The City shall undertake a review of its street standards and revise them as necessary to ensure that new residential streets are no wider than is required by safety and emergency access considerations and on-street parking needs.

IMPACTS

The analysis indicates that growth in the region will result in worsening of traffic service levels in the city, even without any development in Eureka. Growth in the region will result in traffic service levels exceeding the City's service level standards along segments of several roadways. Most of the traffic is not, however, the result of any new development within the city limits.

Assuming construction of the Waterfront Drive extension, roadways with service levels exceeding the City's standards include the following:

- 4th Street east of Myrtle Avenue LOS F
- Harrison Avenue LOS D-F
- Eastern section of Harris Street LOS D-F
- Myrtle Avenue LOS D-F

The *General Plan*, as a result of providing for the extension of Waterfront Drive, will have beneficial impacts on the roadway system.

Worsening conditions along 4th Street, Harrison Avenue, and the eastern section of Harris Street occur based only on projected growth in the region, even with no new development in Eureka. These are therefore not impacts of the *General Plan*.

Projected growth in the region is also expected to result in service levels for D to F along Myrtle Avenue, as shown in Figure 4-2. Additional development within the city limits according to the *General Plan* will result in a worsening of these conditions in some segments of Myrtle Avenue. The *General Plan* will therefore contribute to the cumulative negative impacts on this roadway. Service levels along these roadways are considered a significant, cumulative adverse impact.

MITIGATION MEASURES

No feasible alternative routes can be constructed to mitigate the impacts on Myrtle Avenue. Widening Myrtle Avenue would require additional right-of-way acquisition, which would be very costly and would have significant impacts on adjoining properties; for these reasons, it was not considered feasible to propose a major widening project on Myrtle Avenue. There are therefore no feasible mitigation measures to reduce the cumulative impacts on these roadways to a less-than-significant level.

4.2 PARKING

EXISTING CONDITIONS

As with most communities, parking problems in Eureka are almost exclusively confined to the downtown Core Area. Recognizing the importance of the issue, in 1986, the City commissioned a parking study to look at parking in downtown Eureka. The *Downtown Parking Structure Feasibility Study* (Winzler and Kelly, Consulting Engineers, 1986) included a parking deficiency analysis relevant to the General Plan update process. It identified 3,515 parking spaces in a study area bounded by the Harbor, I Street, Seventh Street, H Street, Eighth Street, C Street, Seventh Street and A Street. It further identified a "focus area" bounded by First, Seventh, and D Streets. The 3,515 spaces were categorized as shown in Table 4-9.

TABLE 4-9		
DOWNTOWN PARKING SPACES		
Category	Total Study Area	Focus Area
Public Parking		
On-Street Non-Metered*	1,498	863
Off-Street Metered	326	187
Off-Street Non-Metered	220	115
Private for Private Use	1,370	821
Private for Public Use	101	101
Total	3,515	2,087
*Includes spaces from which meters were removed following completion of the study (November 1989).		
Source: City of Eureka <i>Downtown Parking Structure Feasibility Study</i> , Winzler and Kelly, 1986		

Occupancy studies were conducted during the second week of December 1986 to determine the degree to which the above spaces were being used during the peak holiday shopping season. Similar studies were conducted in March 1987 to determine peak hour usage during the non-holiday season. Table 4-10 summarizes the results of this study.

TABLE 4-10		
DOWNTOWN PARKING USAGE		
Type of Parking	Study Area Occupancy (%)	Focus Area Occupancy (%)
<i>December Holiday Peak Hour Usage (1-2 p.m.)</i>		
On-Street Metered	83%	88%
On-Street Non-Metered	74%	86%
Off-Street Metered	84%	96%
Off-Street Non-Metered	66%	100%
Private for Private Use	61%	66%
Private for Public Use	78%	78%
Total	71%	80%
<i>March Peak Hour Usage (1-2 p.m.)</i>		
On-Street Metered	64%	70%
On-Street Non-Metered	67%	82%
Off-Street Metered	78%	96%
Off-Street Non-Metered	64%	97%
Private for Private Use	52%	59%
Private for Public Use	67%	67%
Total	62%	71%
Source: City of Eureka Downtown Parking Structure Feasibility Study, Winzler and Kelly, 1986		

The occupancy survey also estimated the number of blocks that were occupied at a rate of 85 percent in both periods. It concluded that 67 percent of the blocks in the focus area exceeded the 85 percent criterion during the holiday period, and that 40 percent of the blocks exceeded the criterion in the March period. On the basis of this analysis plus supplemental parker attitude surveys, the study concluded that parking structure(s) would be warranted in downtown Eureka.

The General Plan Consultants reached a different conclusion given the same information evaluated in the *Downtown Parking Structure Feasibility Study*. Both periods considered in the study represent *peak* periods, and it is typically quite costly to design parking to accommodate peak periods. Further, the holiday peak period is of relatively short duration (4 weeks out of 52), and competing facilities such as the Eureka Mall become saturated during these periods as well. On the basis of these statistics plus independent walking tours of the area, the General Plan Consultants suggest that there is currently a fairly effective balance between parking demand and supply in Eureka's Core Area.

METHODOLOGY

Assumptions

- The City will continue to require parking for residential and commercial development through General Plan policy and Zoning Ordinance requirements.

Thresholds of Significance

The California Environmental Quality Act does not specifically discuss parking as an issue to be addressed in the environmental review process. For purposes of this *EIR*, an impact is considered significant if new development would adversely affect existing parking availability or would create demand for parking that could not be met.

IMPLICATIONS OF THE LAND USE DIAGRAM

Development under the *Land Use Diagram* will result in additional vehicles and commercial and industrial destinations with a need for additional parking. New residential and outlying commercial development is generally required to provide on-site parking to accommodate demand through zoning requirements. Intensification of the Core Area will, however, create the need for additional parking.

GENERAL PLAN POLICY RESPONSE

The following policies address parking needs associated with development in the Core Area:

Core Area Circulation and Parking

- 3.H.3. *The City shall work with Core Area business and property owners to develop a parking management program to balance the long and short-term parking needs of residents, employees, business patrons, and tourists.*
- 3.H.4. *The City shall restripe public parking lots in the Core Area to improve circulation and parking efficiency.*
- 3.H.5. *The City shall improve parking lot safety, where necessary, through improved lighting in lots and accessways and increasing visibility of parking areas through removing/pruning high shrubs, relocating dumpsters, and removing other obstacles to visibility and surveillance of lots.*
- 3.H.6. *The City shall discourage the placement of parking lots along major commercial and high pedestrian-use street frontages in the interest of maintaining continuous building frontages along the primary commercial streets in the Core Area (i.e., F, 2nd, 4th, and 5th Streets).*
- 3.H.7. *Except for proposed future parking structures, the City shall discourage parking lots located at street intersections throughout the Core Area.*
- 3.H.8. *The City shall provide clear directional signs to major public parking areas (including sites designated for parking structures).*

IMPACTS

Development under the *General Plan* will result in increased demand for parking. This will be most apparent in the Core Area, where the *General Plan* promotes revitalization and intensification. Recognizing the effect that this revitalization and intensification will have on parking demand, the *Policy Document* addresses the need for additional well-located parking facilities in the Core Area.

The *General Plan* policies cited above, along with other existing parking requirements in the Zoning Ordinance, will reduce the impacts of the *General Plan* to a less-than-significant level.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the *General Plan* are necessary.

4.3 PUBLIC TRANSIT

ENVIRONMENTAL SETTING

The City of Eureka currently operates two transit services within the city, while Humboldt County operates a countywide system that includes stops within Eureka. Eureka Transit Service (ETS) currently operates five

fixed routes serving Eureka, Myrtle town, Cutten, and Pine Hill. These routes operate at hourly headways between 6 am and 7 pm. The routes have been in place since July 1993 and provide a high level of coverage to the city.

The City also operates a Dial-a-Ride (DAR)/Dial-a-Lift (DAL) program for mobility handicapped individuals in the city and its environs. The program operates through the Eureka Yellow Cab company which uses taxicabs for the DAR service and operates a single lift-equip van for the DAL service. Users must be certified for eligibility; requirements include (1) residency in a board and care home or (2) a doctor-certified mobility handicap.

The City is also part of a Joint Powers Agreement with Humboldt County and four other cities that make up the Humboldt Transit Authority. HTA's most recent *Transit Development Plan* was completed in 1989. The single HTA service that includes Eureka is the Redwood Transit System, which provides intra-county service along a 62-mile corridor between Scotia on the south and Trinidad to the North. Unlike ETS, the Redwood Transit System route does not operate on a repeating headway, but rather, the schedule is tied to a variety of activity centers along the route. Between 5:00 am and 11:00 pm, 22 buses in each direction pass through or terminate in Eureka, for a service frequency of slightly less than one bus per hour (each way). Transfer policies have recently been improved between ETS and RTS so that within the city, transfers on RTS are free. Passengers transferring between the two systems for travel out of the city receive a 15¢ reduction on the second fare. The HTA 1989 *Short Range Transit Plan* recommends continuing the present level of service for the five-year duration of the plan.

The *Transit Development Plan* includes three basic goals for transit in Eureka (provide efficient and effective service; provide an alternative to private automobile; and develop new transit markets), each accompanied by objectives and performance measures.

METHODOLOGY

Assumptions

- Existing service providers will continue to be the major forms of transit service for at least the next 15 years.

Thresholds of Significance

The California Environmental Quality Act does not specifically discuss public transit services as an issue to be addressed in the environmental review process. Such services do, however, play an important role in the overall development of a community's transportation system. For purposes of this EIR, an impact is considered significant if new development would adversely affect existing transit services or would create demand for such services that could not be met.

IMPLICATIONS OF THE LAND USE DIAGRAM

The *Land Use Diagram* provides for continued infill development at densities generally consistent with current uses. This suggests that the types of transit services that are operational today will continue to be appropriate in the future. Intensification of the Core area will create greater opportunities for efficient public transit service downtown.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies and programs to address public transit services:

Public Transit Policies

- 3.B.1. *The City will continue to fund and operate the Eureka Transit Service in a manner that responds to the needs of its primary markets--senior citizens, the economically disadvantaged, school-aged children, college students, and others determined to be transit-dependent--within the limitations of funding available to the City.*
- 3.B.2. *The City shall work with the staff of Humboldt Transit Authority to maximize the coordination of the Eureka Transit Service and the Redwood Transit System operated by Humboldt County. Coordination shall be reviewed in terms of scheduling, fares, and in providing for a common transfer location in Eureka's Core Area.*
- 3.B.3. *The City shall work with the Humboldt Transit Authority to develop an intermodal transportation center between A and Commercial Streets, south of Waterfront Drive and the railroad tracks. The center would provide a central focal point for all transportation modes serving Humboldt County, including buses, cabs and limousines, railroad passenger service, bay excursion services, horse-drawn carriages, and possibly cruise ships and trolleys. (Intermodal Center Feasibility Study)*
- 3.B.4. *The City supports continuation of Amtrak feeder service to Eureka and coordination of this feeder service with the Eureka Transit Service and the Redwood Transit System.*
- 3.B.5. *Where appropriate, the City shall require new development to dedicate easements for and provide sheltered public stops for transit patron access.*
- 3.B.6. *The City shall pursue all available sources of funding for capital and operating costs of the Eureka Transit Service.*
- 3.B.7. *The City shall work to broaden ridership of public transit to increase farebox revenue and decrease reliance on subsidies.*
- 3.B.8. *The City shall work with Core Area employers to encourage their employees to use public transit, thereby reducing traffic congestion and parking demand in the Core Area.*

IMPACTS

Development under the *General Plan* will create some additional demand for transit services, generally along existing routes. The policies of the *General Plan* encourage and support transit development and land use patterns that attempt to improve the potential for transit use in the future. The policies of the *Policy Document* support transit development and use and promote development patterns and densities to foster transit use. Higher use of transit should result in a higher level of support for transit in federal, state, and local funding. The *General Plan* would, therefore, have a less-than-significant impact on public transit services.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs included in the *General Plan* are necessary.

4.4 RAIL TRANSPORTATION

ENVIRONMENTAL SETTING

Humboldt County and the City of Eureka have an extensive railroading history that extends as far back as 1875. In that year, "Vance's Mad River Railroad" began hauling redwood between the Mad River Slough and Vance's Mill north of Arcata. Numerous small railroad companies built links between logging areas, mills

and smaller towns along the rivers, many of them coming under the umbrella of the Northwestern Pacific Railroad in 1906. Southern Pacific and Santa Fe railroads then led a joint project to build the most difficult segment between Eureka and Willits, joining Humboldt County by rail to the bay area and the rest of the nation. The driving of a "golden spike" at Cain Rock on October 23, 1914, led to one of the largest celebrations in the history of the City of Eureka, signifying the importance of the railroad to the City at that time.

Significant quantities of freight and a successful passenger service operated from Eureka to Sausalito through the 1920's. However, the construction of U.S. 101 led to increasing declines in passenger use; the last scheduled passenger service on the line occurred in 1971. Until 1984, the line was known as the Northwestern Pacific Railroad, though for most of that time it was a wholly owned subsidiary of Southern Pacific lines. In 1984, SP split off the portion north of Willits to the Eureka Southern Railroad. However, this company was forced to file for railroad bankruptcy in 1986. Utilizing funds from State Proposition 116, the North Coast Railroad Authority (comprising representatives of Humboldt and Mendocino County as well as Caltrans) acquired the line and are operating it as the North Coast Railroad.

Throughout its history, the line from Eureka to Willits has been subject to periodic interruption in service due to washouts, fires, and degraded trackbed. At the present time, the railroad is under a restraining order from the Federal Railway Authority which prohibits it from operating revenue passenger service between Fort Seward and Willits. The NCRA is committed to a rehabilitation program that will allow the restraining order to be removed. At that time, it is expected that passenger service will be resumed on summer weekends in response to demand for tourist-oriented recreation rail service of the type operated prior to the imposition of the restraining order. A total of 15 trains were operated in 1989 before the restraining order was imposed. NCRA has also operated five excursion runs between Thanksgiving and Christmas between Eureka and the Samoa peninsula.

The California Department of Transportation (Caltrans), under whose funding umbrella the NCRA operates, authorized Phase I of the *Intercity Rail Passenger Service Feasibility Study*; the report was completed in August 1992. The fundamental conclusion of the report was that intercity passenger service (generally defined as at least one train per day) was not feasible over the entire Eureka-San Francisco corridor. It concluded that tourist-oriented service would be financially feasible between Eureka and Willits; between Willits and Santa Rosa, only freight service was deemed feasible; south of Santa Rosa, commuter service may be feasible. Phase II of the *Intercity Rail Passenger Service Feasibility Study*, completed in March 1994, concluded that in order for passenger service to be feasible, the NCRA would have to achieve a 55 percent farebox recovery ratio.

METHODOLOGY

Assumptions

- NCRA is expected to continue to be a viable entity for the foreseeable future. NCRA is currently embarked on the major maintenance effort necessary to restore the railroad to a condition whereby the Federal Railway Administration will again permit passenger service between Willits and Eureka.
- The railroad continues to operate a very small-scale freight operation; expectations are that freight service will grow at moderate rates in coming years.

Thresholds of Significance

The California Environmental Quality Act does not specifically discuss rail service as an issue to be addressed in the environmental review process. Such service does, however, play a role in the overall development of a community's transportation system. For purposes of this EIR, an impact is considered

significant if new development would adversely affect existing rail services or would create demand for such services that could not be met.

IMPLICATIONS OF THE LAND USE DIAGRAM

The NCRA is likely to continue to serve a small but useful role in the city's transportation system. If it is successful in marketing its tourist-oriented service, the railroad could serve as one of many attributes useful in building the City's tourist base. Due to the design and condition of the roadbed, which when restored to acceptable operating condition will still be limited to an average speed of 25 miles-per-hour, it is unlikely that the railroad will be a significant alternative to the automobile for either commuters or tourists over the lifetime of the *General Plan*.

Freight service will largely depend on the type and location of the City's industrial users. New industrial development could be served by freight rail.

GENERAL PLAN POLICY RESPONSE

The *General Plan* includes the following policies to address rail transportation.

Rail Transportation

- 3.F.1. *The City shall support efforts of the North Coast Railroad to re-establish passenger rail service within Humboldt County and between Eureka and the San Francisco Bay Area.*
- 3.F.2. *The City shall work with the North Coast Railroad to determine if feasible locations for switching operations can be located outside the city, allowing the current balloon track area to be used for industrial or commercial development purposes.*

IMPACTS

Development under the *General Plan* will create some additional demand for freight service to new industrial development, but this would reflect only a modest expansion of existing service. The policies of the *General Plan* encourage and support passenger rail development, but it would not be required to serve projected development in the city limits. The *General Plan* would therefore have a less-than-significant impact on rail service.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs included in the *General Plan* are necessary.

4.5 WATER TRANSPORTATION

ENVIRONMENTAL SETTING

The Humboldt County draft *Regional Transportation Plan* summarizes the current status of marine transport in Humboldt County. Humboldt Bay is the only California port north of San Francisco with sufficient depth to serve ocean-going freighters. The United States Army Corps of Engineers is responsible for maintaining adequate channel depth, and has been engaged in deepening major channels to 35 feet and minor channels to 26 feet. The RTP contains the following policies on marine transportation:

Policy 26: *The deepening of the ship channels in Humboldt Bay to a minimum depth of 35 feet is justified. The Humboldt County Association of Governments supports continued deepening of the channels to provide access to existing and planned port facilities.*

Policy 27: *Humboldt County Association of Governments supports the improvement and modernization of commercial fishing facilities in Humboldt County. The Cities of Eureka, Arcata and Trinidad, Humboldt County and Humboldt Bay Harbor District should actively and cooperatively seek to encourage private investment into commercial facilities, and where necessary, invest public funds into rehabilitation, upgrading and expanding boat marinas and public piers.*

Policy 29: *Local business groups should be encouraged to work with local government to encourage private investment into facilities such as :*

- *Boat building and repair facilities*
- *Fleet service facilities*
- *Fish processing facilities*
- *Scaled down container facilities*
- *Passenger liner wharf-side facilities*

Policy 30: *Humboldt Association of Governments supports united efforts of the City of Eureka and the Humboldt Bay Harbor Recreation and Conservation District to rehabilitate the Eureka Waterfront.*

Policy 31: *The Association supports maximal diversification of Humboldt Bay's Marine resources through local agency encouragement of passenger marine traffic.*

METHODOLOGY

Assumptions

- City efforts at revitalizing waterfront and boating facilities will increase the use of water transportation.

Thresholds of Significance

The California Environmental Quality Act does not specifically discuss water transportation services as an issue to be addressed in the environmental review process. For purposes of this EIR, an impact is considered significant if new development would adversely affect existing water transportation services or would create demand for such services that could not be met.

IMPLICATIONS OF THE LAND USE DIAGRAM

The *Land Use Diagram* would promote additional port-related development that would create a need for additional water transportation services.

GENERAL PLAN POLICY RESPONSE

The following policies and programs address water transportation.

Water Transportation

- 3.G.1. *The City shall protect and, where feasible, upgrade facilities serving the commercial fishing and recreational boating industries. Existing commercial fishing and recreational boating space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed*

recreational boating facilities shall, to the maximum extent feasible, be designed and located so as not to interfere with the needs of the commercial fishing industry.

- 3.G.2. *The City shall limit new or expanded berthing facilities to sites at the Woodley Island Marina, the Eureka Small Boat Basin, or the Eureka Channel Inner Reach. Facilities supporting party- or charter-fishing boat operations shall be provided at these sites to meet demand for them.*
- 3.G.3. *The City shall participate in the reconstruction of the landing dock near the foot of C Street.*
- 3.G.4. *The City shall participate in the design and construction of a public berthing facility in Inner Reach near the Adorni Center.*
- 3.G.5. *The City shall participate in the development of Fisherman's Parcel for fishing fleet activities.*
- 3.G.6. *The City shall participate in the rehabilitation of the existing small boat basin, dredging and expansion of the Humboldt Yacht Club, and development of a fishing industry support facility.*

IMPACTS

The *General Plan* promotes the development of coastal-dependent industry along the city's waterfront for future economic development. To facilitate this development, the plan promotes improvements to water transportation facilities. Such improvements will enhance the opportunities for water transportation. The *General Plan* would therefore have a beneficial impact on water transportation.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the *General Plan* are necessary.

CHAPTER 2

2.1 PUBLIC WATER SUPPLY AND DELIVERY

ENVIRONMENTAL SETTING

The City of Eureka is a coastal city located on the northern end of the Eureka Peninsula, approximately 100 miles north of San Francisco. The city is situated on a rugged coastline with steep hills and a deep harbor. The city's water supply is primarily derived from the Eureka River, which flows through the city and empties into the harbor. The city's water supply system is managed by the Eureka Water Department, which is responsible for the delivery of water to the city's residents and businesses. The city's water supply system is a complex network of pipes, pumps, and storage tanks. The city's water supply system is a critical component of the city's infrastructure and is essential for the city's economic and social well-being. The city's water supply system is a complex network of pipes, pumps, and storage tanks. The city's water supply system is a critical component of the city's infrastructure and is essential for the city's economic and social well-being.

ASSUMPTIONS

- The source material will continue to require frequent monitoring and repair.
- The system's capacity will continue to be determined by the city's water supply system.
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CHAPTER 5

PUBLIC FACILITIES AND SERVICES

This chapter assesses the potential impacts of development under the *General Plan* on the public facilities and services serving Eureka. The issues addressed in this chapter are water, wastewater, storm drainage, law enforcement, fire protection, solid waste collection and disposal, and utility services. The analysis in this chapter focuses on development within the city limits.

5.1 PUBLIC WATER SUPPLY AND DELIVERY

ENVIRONMENTAL SETTING

City of Eureka Water System

The City is responsible for the delivery of water to the residential, commercial, and industrial customers within the city's boundaries. Water is purchased by the City from the Humboldt Bay Municipal Water District (HBMWD). The HBMWD withdraws water from the Mad River (near Essex), provides disinfection, and transports it to its various customers, including the City of Eureka, which takes delivery of the water in northern Arcata.

The City receives its water from two source mains. One is located on the Samoa Peninsula. It crosses the Bay and enters the city at the pumping station at Truesdale Street. The second source main is located generally east of Highway 101 and enters the City system at the City's facilities located at the north end of Walnut Drive. The main east of Highway 101 provides all water for normal usage; the Samoa main provides an emergency intertie to the City's system.

The unincorporated areas surrounding the city on the east and south are provided water service through the Humboldt Community Services District (HCSD). The City and HCSD have a service agreement to commingle source water, and HCSD has a source intertie with the City's system at the intersection of Harris Street and Hubbard Lane.

METHODOLOGY

Assumptions

- The City's water supply will continue to be provided through purchase from the Humboldt Bay Municipal Water District.
- The City's water supply will continue to be treated by the City and the HBMWD consistent with the operating permits issued by the State of California Department of Health Services.
- The source mains will continue to require frequent monitoring and repair.
- The system size, peaking factors, and storage capacity will continue to be determined utilizing the City's engineering standards and the standards contained in state regulations and the insurance rating system.
- The City (and other agencies served by HBMWD) and the HBMWD will continue in their regional water supply planning efforts.
- The City will continue its water conservation implementation program.

Thresholds of Significance

Appendix G to the *CEQA Guidelines* includes four "thresholds of significance" relevant to water supply; implementing the *General Plan* will have significant impacts if the implementation results in:

- A substantial degradation of water quality, including a degradation resulting from inadequate supply;
- A contamination of a public water supply;
- The encouragement of projects which use large amounts of water; and
- The use of water in a wasteful manner.

Appendix G also includes thresholds of significance covering a "substantial degradation or depletion of groundwater resources," and a "substantial interference with groundwater recharge." However, the likelihood that these thresholds will be crossed is considered to be negligible, since the primary water supply in the Planning Area is sourced outside the Planning Area.

For purposes of the *EIR*, an impact is also considered significant if adoption or implementation of the *General Plan* would result in the approval of development without adequate system capacity or the ability to add capacity through facility expansion or addition of water purchase, or if the water supply (under the control of the City) would not be adequate to serve projected new development.

IMPLICATIONS OF THE LAND USE DIAGRAM

Water Supply

The additional future water use resulting from the anticipated growth included within the *General Plan* is estimated and based upon recent average daily demand (4.3 million gallons per day—87% residential, 13% other). With the increased focus on residential development in the core area (second floors, etc.) and the anticipated waterfront development, increased water use in this area would be expected. Specific levels of water use, especially heavy commercial, visitor serving, or light industrial in nature, can vary greatly among uses and are presently unknown. Local water system evaluation will be required early in the development of major projects.

Water Storage

The City's storage capacity totals 22.3 million gallons, including the newly constructed reservoir at the north end of Walnut Drive (20 million gallons in two 10-million-gallon bays). The existing high-pressure storage facilities located on Harris Street are old and may require replacement or retrofitting. The City is to include within its Capital Improvement Program consideration for their replacement and sizing. Future, as well as present, users should contribute to their replacement through the use of development fees and monthly utility user charges.

GENERAL PLAN POLICY RESPONSE

The following policies address the implications of the development under the *General Plan* on the City's water supply and delivery system.

Water Supply and Delivery

- 4.B.1. *To the extent feasible, within the Coastal Zone, the City shall preserve water system capacity needed for priority uses. These uses and their order of priority are as follows:*
- l. Coastal-dependent uses;*
 - m. Essential public services;*
 - n. Basic industries vital to the economic health of the region, state or nation;*
 - o. Public recreation;*
 - p. Commercial recreation; and*
 - q. Visitor-serving uses.*
- 4.B.2. *The City shall require proponents of new development to demonstrate the availability of a long-term, reliable water supply and adequate water supply infrastructure. The City shall require all new development within the city to connect to the City's water system. New development shall be responsible for constructing or financing any water system upgrades necessary to serve the development.*
- 4.B.3. *Through its Capital Improvements Program, the City shall continue to conduct leak detection surveys and replace or repair existing water lines that are inadequate to serve existing development.*
- 4.B.4. *The City shall promote efficient water use and reduced water demand by requiring water-conserving design and equipment in new construction and encouraging retrofitting existing development with water-conserving devices.*
- 4.B.5. *The City shall identify all development within the city limits not currently served by the City's water system with the intent of requiring connection to the system.*

General Public Facilities and Services

- 4.A.10. *The City shall require that new development contribute its fair share to providing all public services and infrastructure, including schools, necessary to serve that development.*

IMPACTS

Development under the *General Plan* will increase the demand for potable water, resulting in a net increase in the City's consumption and a potential need to purchase additional water from the HBMWD. The HBMWD has indicated to the City the availability of sufficient supplies of water for the level of development forecasted in the *General Plan*.

Water quality regulations (treatment and monitoring requirements and standards) may change in the future, possibly requiring higher levels or different types of treatment. This would increase the need to upgrade the HBMWD facilities, possibly with City participation. This would not, however, be an impact associated with the *General Plan*.

The City must continue its active participation in maintaining and providing an adequate potable water system. This is to be accomplished through: its collaboration regarding supply volume and quality with the HBMWD; its regular inspection, repair, and maintenance of system components; and the implementation of its Capital Improvement Program.

As growth occurs, the City's water storage capacity, the number of tanks, their size, and their locations, will be more specifically determined through focused system evaluations and funded through the City's Capital Improvement Program.

Larger-scaled developments could adversely affect local transmission or distribution facilities. The implementation of the City's policy to require new development to provide for all facilities needed to serve a specific area will reduce the potential impact to a level considered to be less-than-significant.

MITIGATION MEASURES

Implementation of the *General Plan* will not result in significant impacts, so no mitigation measures are required. The requirement for new development to demonstrate that it will be served by adequate water supply and infrastructure would be strengthened, however, by the addition of the following policy to the *Policy Document*:

M5.1: The City shall require an evaluation of potential water system impacts resulting from proposed major projects. The definition of "major project" shall be agreed to between the Community Development Department and the Engineering Department. The evaluation shall identify any improvements required in the water system to maintain adequate service levels if the major project is approved.

5.2 WASTEWATER COLLECTION, TREATMENT, AND DISPOSAL

ENVIRONMENTAL SETTING

The City of Eureka's sanitary sewer system consists of an extensive wastewater collection and treatment system. The collection system includes five major pumping facilities and numerous minor lift stations. The treatment system includes a plant located in the southern part of the city along Humboldt Bay, an ocean outfall, wetland pond storage, and sludge placement facilities.

According to the City of Eureka, the City had approximately 10,500 account-service connections as of July 1993. Approximately 87 percent were residential users and 13 percent were commercial users. In addition to supplying the needs of Eureka, the City of Eureka's Publicly Owned Treatment Works also provide services to HCSD for the treatment of approximately 1.42 million gallons per day (mgd) of wastewater each year; this includes service to Humboldt Hill and Fields Landing.

The City's wastewater collection system is generally adequate to serve existing developed areas in the city. The most significant difficulties in operating and maintaining the system relate to the age of the collection piping. The length of the collection system is approximately 704,000 feet. Sewage service is not currently provided to the incorporated area on Indianola Road.

Major infiltration/inflow (I/I) studies, prepared in 1980 in anticipation of the installation of the City's wastewater treatment facility, indicated excessive levels of I/I. The Greater Eureka Service Area was divided into major subareas to determine I/I peaks. The results indicated that substantial volumes of I/I entered the collection facilities during the five wet months (November to March) every year.

METHODOLOGY

Assumptions

- The City will continue to utilize wastewater flow standards developed by the state and federal governments for use in wastewater facility sizing.
- The City will continue to make public investments in the replacement of wastewater collection or transmission lines experiencing unacceptable levels of infiltration/inflow (I/I).

- The City's Capital Improvement Program provides for the routing/rerouting of wastewater flows generated in the Cutten/Ridgewood area (outside the city) and flows generated in the city south of Harris Street through new facilities located generally in the Martin Slough area. The improvements are assumed to be carried out during the planning horizon included within the *General Plan*.
- The City will continue to meet its obligations under the National Pollutant Discharge Elimination System (NPDES) permit.

Thresholds of Significance

For the purposes of this *EIR*, an impact would be considered significant if adoption or implementation of the *General Plan* would result in new development without adequate system capacity, either currently available or to be provided through the new development.

IMPLICATIONS OF THE LAND USE DIAGRAM

Development under the *General Plan* will increase wastewater flows and may require expansion in local wastewater collection or transport systems, while treatment facilities appear to have adequate capacity to handle the projected growth. The disposal system will experience increased waste flows and will continue to require monitoring as required under the state's discharge permit. The outfall is sized adequately to accommodate the design flow from the treatment facilities.

The construction of the alternative trunk line from the Cutten/Ridgewood area (outside the city) and the area south of Harris Street in the city to the treatment facilities would have beneficial effects (reductions in flow) on the existing transmission and pumping systems and cross-town interceptor.

GENERAL PLAN POLICY RESPONSE

The following policies address the implications of new development under the *General Plan* on the wastewater collection, treatment, and disposal system.

Wastewater Collection, Treatment, and Disposal

- 4.C.1. The City shall promote efficient water use and reduced wastewater system demand by requiring water-conserving design and equipment in new construction and encouraging retrofitting with water-conserving devices.
- 4.C.2. The City shall continue its efforts to detect and correct infiltration/inflow (I/I) in its wastewater collection system.
- 4.C.3. The City shall require pretreatment of commercial and industrial wastes prior to their entering the city collection and treatment system.
- 4.C.4. The City shall prohibit the development of new on-site sewage treatment and disposal systems within the city limits.
- 4.C.5. The City shall require all new development within the city limits to connect to the City wastewater treatment system.
- 4.C.6. The City shall not allow extension of sewer service outside of the city limits, except in limited circumstances to resolve a public health hazard resulting from existing development, or where there is a substantial overriding public benefit.

- 4.C.7. *The City shall identify all existing development not currently served by the City wastewater treatment system with the intent of requiring connection to the system.*

General Public Facilities and Services

- 4.A.10. *The City shall require that new development contribute its fair share to providing all public services and infrastructure, including schools, necessary to serve that development.*

IMPACTS

Development under the *General Plan* may require localized improvements to the existing collection and transport system where major commercial, visitor-serving, or industrial uses are proposed. Implementation of the policies in the *General Plan*, combined with the City's ongoing Capital Improvement Program, reduce potential environmental impacts to levels that are less-than-significant.

MITIGATION MEASURES

Mitigation is not required for effects on the wastewater collection, treatment, or disposal facilities. The City could, however, strengthen its requirements that new development provide for its wastewater needs by adding the following policy to the *Policy Document*:

- M5.2 *The City shall require an evaluation of potential wastewater system impacts resulting from proposed major projects. The definition of "major project" shall be agreed to between the Community Development Department and the Engineering Department. The evaluation shall identify any improvements required in the wastewater system to maintain adequate service levels if the major project is approved.*

5.3 STORM DRAINAGE

ENVIRONMENTAL SETTING

The majority of Eureka is located on a terrace that slopes gradually upwards from the bay on the north and west to approximately 100 feet in elevation to the south and east. The topography contains both large and small natural drainages which have both ephemeral and perennial streams. According to the most recent 30-year average, Eureka experiences approximately 37.5 inches of rainfall each year. Seventy-three percent of the annual rainfall occurs between the months of November and March.

A large percentage of the storm drainage network in Eureka is made up of street (gutter) flow. Drainage pipes and drainage ditches ultimately flow to either natural drainages or larger subterranean pipe drains that ultimately lead to the bay. Slopes generally are sufficient at the upper reaches to provide cleansing velocities. The majority of pipe is concrete, with some corrugated metal pipe and plastic. Undeveloped drainageways or gullies within Eureka consist of shallow to steep slopes covered with riparian vegetation. Drainages tend toward flat marshland in their lower reaches adjacent to the bay. Both silver salmon (Coho) and steelhead are reported in the various sloughs that are not blocked off by tidegates.

Responsibility for storm drainage in the Planning Area falls into various jurisdictions: the City of Eureka, California Department of Transportation (Caltrans), and the County of Humboldt are responsible for operations, and the County, the California Coastal Commission, and the Regional Water Quality Control Board (RWQCB) have regulatory authority. Street maintenance and drainage outside of the city limits are the responsibility of Humboldt County. Street maintenance and drainage for Broadway, 4th Street, 5th Street, and other portions of Highway 101 are the responsibility of Caltrans as part of the state highway system.

The City of Eureka has prepared a preliminary draft of a storm drainage master plan, which covers 11,392 acres of land in the Planning Area. According to the *Preliminary Storm Drainage Master Plan*, much of Eureka's existing storm water drainage system is inadequate. Upper reaches of the drainage system generally depend on inadequate gutter flow, and lower reaches often have undersized pipes and poorly constructed drainage inlets. The report also evaluated drainage activity in Fay Slough, Ryan Creek and Ryan Slough, Martin Slough, and in the upland area from Ridgewood Heights in a northwesterly direction to the Herrick Avenue intersection with Broadway.

The RWQCB requires permits from all industrial uses that discharge storm water and all development projects greater than five acres in size. The City of Eureka currently has no role in the monitoring or enforcement of this program. It is likely that as the rules, requirements, and regulations for storm water discharge become implemented, developers may incur additional costs for solids retention as well as for monitoring and detention facilities to control the quality of effluent released into the bay and waterways.

METHODOLOGY

Assumptions Regarding Design and Hydrologic Considerations

The City has completed a *Preliminary Storm Drainage Master Plan* (Winzler & Kelly, 1996), incorporated herein by reference. The study contains information pertaining to design considerations, hydrologic criteria, and recommended storm drain system improvements. The selected improvements may be included within the City's Capital Improvement Program. Any improvements proposed in implementing that plan are assumed to be implemented consistent with the policies in the *General Plan*.

Assumptions About Collection and Detention

Within the commercial core area of the city, there are very limited opportunities for onsite collection or detention of storm waters or the controlled release of these waters into the City's storm drainage system. As a result, the benefits of the use of this type of facility are not included within the master plan, and are not assumed in this *EIR*.

The areas which discharge into the gulch greenways provide opportunities to modulate storm water flows, as well as providing various levels of natural treatment of nonpoint source pollution. Such programs are assumed to be implemented.

Thresholds of Significance

For the purpose of this *EIR*, an impact is considered significant if adoption or implementation of the *General Plan* would result in new development without adequate storm drainage system capacity either currently available or to be provided by the new development. Stormwater drainage improvements could also result in significant impacts related to the ecosystems of the city's gulch greenways (see also Chapter 6)

IMPLICATIONS OF THE LAND USE DIAGRAM

Within the City's jurisdiction and adjacent areas, storm water discharge volumes will incrementally increase as a result of increased impervious area involved in development. This will occur especially in those undeveloped or underdeveloped areas where increases in roof areas or parking lots occur.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies to address storm drainage concerns.

Stormwater Drainage

- 4.D.1. *The City shall consider establishing an assessment district to fund citywide storm drainage improvements, including replacement, repair, or relocation of storm drain facilities.*
- 4.D.2. *The City shall encourage the use of natural stormwater drainage systems in a manner that preserves and enhances natural features.*
- 4.D.3. *The City shall support efforts to acquire land or obtain easements for drainage and other public uses of floodplains where it is desirable to maintain stream courses in a natural state.*
- 4.D.4. *The City shall consider recreational opportunities and aesthetics in the design of stormwater detention/retention and conveyance facilities.*
- 4.D.5. *The City shall promote sound soil conservation practices and carefully examine the impact of proposed urban developments with regard to water quality and effects on drainage courses.*
- 4.D.6. *The City shall improve the quality of runoff from urban and suburban development through use of appropriate and feasible mitigation measures including, but not limited to, artificial wetlands, grassy swales, infiltration/sedimentation basins, riparian setbacks, oil/grit separators, and other best management practices (BMPs).*
- 4.D.7. *The City shall require new development that would increase storm drainage runoff in a 10-year storm event more than one cubic foot per section to provide retention/siltation basins to limit new runoff to prior-to-development flows.*
- 4.D.8. *The City shall encourage new project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions.*
- 4.D.9. *The City shall require new projects that affect the quantity or quality of surface water runoff to allocate land as necessary for the purpose of detaining post-project flows and/or for the incorporation of mitigation measures for water quality impacts related to urban runoff. To the maximum extent feasible, new development shall not produce a net increase in peak stormwater runoff.*
- 4.D.10. *In the Martin Slough drainage, the City shall cooperate with Humboldt County and affected landowners to minimize potential damage and economic loss arising from stormwater runoff, consistent with other policies of this General Plan.*

General Public Facilities and Services

- 4.A.10. *The City shall require that new development contribute its fair share to providing all public services and infrastructure, including schools, necessary to serve that development.*

IMPACTS

Implementation of the *General Plan* will increase storm water runoff resulting from development, involving the increase of impervious surfaces such as roofs and pavement. This will especially occur on areas which are undeveloped or sparsely developed.

The City's Capital Improvement Program should include those storm drain improvements recommended in the City's *Preliminary Storm Drainage Master Plan*. These improvements, combined with the policies of the

General Plan, will reduce the impacts of the implementation of the *General Plan* on the storm water facilities to a less-than-significant level.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the *General Plan*, combined with the state and federal regulatory programs, are necessary.

5.4 LAW ENFORCEMENT

ENVIRONMENTAL SETTING

Law enforcement services are provided within the *General Plan* area by two agencies—the Eureka Police Department and the Humboldt County Sheriff's Department. Their primary jurisdictions are within the city limits and in the adjacent unincorporated area, respectively. The two agencies coordinate their activities through regular joint staff meetings, participation in the Humboldt County Drug Task Force, the Law Enforcement Chief's Association of Humboldt, and by mutual aid agreements as provided by State law. The City's Police Department operates out of its main station office complex located at 604 C Street, and the County Sheriff from the County Courthouse (826 4th Street). The California Highway Patrol (CHP) has primary responsibility for State and Federal highways. In Eureka, the CHP also assists the Eureka Police Department with specialized investigations, technical assistance, and officer backup. In addition, the CHP investigates all traffic accidents that occur on Highway 255 from R Street west, and upon request any traffic accident or traffic matter within the rest of the city.

METHODOLOGY

Assumptions

- The County Sheriff's Department will continue to provide law enforcement services to the unincorporated area, and the Highway Patrol will continue to be responsible for state highways.
- The City will maintain a Community Based Policing Strategy as its system for providing police services.
- Additional equipment and personnel may be required as the City implements the *General Plan*.
- If annexation is pursued by the City, the provision of adequate police services will be assessed operationally and financially prior to any action by the City or other entity on the proposal.

Thresholds of Significance

Appendix G to the *CEQA Guidelines* includes a threshold of significance indicating that implementing the *General Plan* would create a significant effect if it conflicted with adopted environmental plans and goals for the community. For the purpose of this *EIR*, this threshold is interpreted so that an impact is considered significant if adoption or implementation of the *General Plan* would generate demand for law enforcement services that would exceed the ability of the local law enforcement agency to achieve the response time goals included in the *General Plan*.

IMPLICATIONS OF THE LAND USE DIAGRAM

Continued growth throughout the city, including in the Core Area and along the waterfront, will result in increased demand for law enforcement services.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies to address law enforcement.

Law Enforcement

- 4.F.1 *Within the City's overall budgetary constraints, the City shall strive to maintain a staffing ratio of 2.8 personnel per 1,000 residents (1.0 non-sworn and 1.8 sworn).*
- 4.F.2 *The City Police Department shall strive to maintain an average response time of three (3) minutes for calls for critical life-threatening emergencies.*
- 4.F.3 *Within the City's overall budgetary constraints, the City shall provide police facilities (including substation space, patrol, and other vehicles, necessary equipment, and support personnel) sufficient to maintain the above service standards.*
- 4.F.4 *The City shall annually assess police facilities and equipment needs and develop strategies that, at a minimum, maintain the above standards.*
- 4.F.5 *The City shall consider public safety issues in all aspects of commercial and residential project design, including crime prevention through environmental design.*
- 4.F.6 *The City shall continue to support creative approaches to crime prevention and problem solving through the Eureka Police Department's Community Oriented Policing and Problem Solving strategies.*

General Public Facilities and Services

- 4.A.10. *The City shall require that new development contribute its fair share to providing all public services and infrastructure, including schools, necessary to serve that development.*

IMPACTS

The *General Plan* contains policies intended to reduce demand for police services, articulate staffing goals, and provide average response time targets. New development pursuant to the *General Plan* will increase needs for police services, and could create the need of additional support facilities in the form of police annexes or storefronts. The *General Plan* policies require new development to provide for facilities and improvements to meet General Plan standards. The impacts are therefore less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the *General Plan* are necessary.

5.5 FIRE PROTECTION

ENVIRONMENTAL SETTING

Fire services and activities are provided from the headquarters located at 533 C Street, and from substations located at Henderson and Ocean streets and Myrtle Avenue and West. Humboldt Fire District No. 1, the California Department of Forestry and Fire Protection (CDF), and the Fairhaven Fire District provide fire services to the unincorporated areas of the *General Plan* Planning Area.

Humboldt Fire District No. 1 is headquartered on Harris Street near Redwood Acres. CDF headquarters are located in Fortuna. The Fairhaven Fire District station and headquarters are located on the Samoa Peninsula in Fairhaven.

METHODOLOGY

Assumptions

- The City will continue to provide services within the city limits and mutual aid assistance to the adjacent unincorporated areas.
- The City will continue to enhance its fire services through its operational coordination with other fire service providers.

Thresholds of Significance

Appendix G to the *CEQA Guidelines* includes a threshold of significance indicating that implementing the *General Plan* would create a significant effect if it conflicted with adopted environmental plans and goals for the community. For the purpose of this *EIR*, an impact is considered significant if adoption or implementation of the *General Plan* would generate demand for fire protection services that would significantly effect the ability of the City of Eureka's fire department to achieve its fire protection or response time goals included within the *General Plan*.

IMPLICATIONS OF THE LAND USE DIAGRAM

Fire service is similar to police service in terms of the need to maintain a 24-hour response capability and the need to minimize response times to calls for service. Fire response is typically based upon the locations of fire stations, as well as equipment and personnel availability. The *General Plan* provides for future development that will increase demand for fire protection services, particularly in the core area and along the waterfront.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies to address the fire protection.

Fire Protection

- 4.G.1. *The City shall ensure that water main size, water flow, fire hydrant spacing, and other fire facilities meet City standards.*
- 4.G.2. *The City Fire Department shall attempt to maintain an ISO (Insurance Service Organization) rating of 3.*
- 4.G.3. *The City Fire Department shall attempt to maintain an average response time of three (3) minutes for all service calls, including emergency medical service (EMS) calls.*
- 4.G.4. *The City shall require new development to develop or fund fire protection facilities, personnel, and operations and maintenance that, at a minimum, maintains the above service level standards.*
- 4.G.5. *The City shall identify key fire loss problems and design appropriate fire safety education programs to reduce fire incidents and losses.*

- 4.G.6. The City shall implement ordinances to control fire losses and fire protection costs through continued use of automatic fire detection, control, and suppression systems.
- 4.G.7. The City shall cooperate with Humboldt Fire District No.1 and the California Department of Forestry and Fire Protection (CDF) in providing adequate levels of fire protection services in the Planning Area.
- 4.G.8. The City shall provide a dedicated training facility for the fire department that is designed appropriately to provide fire and life safety tactics education for firefighters in order to increase personnel safety, efficiency, and effectiveness.
- 4.G.9. The City Fire Department shall annually inspect all residential rental units for compliance with fire safety requirements.

General Public Facilities and Services

- 4.A.10. The City shall require that new development contribute its fair share to providing all public services and infrastructure, including schools, necessary to serve that development.

IMPACTS

The *General Plan* contains policies which, when implemented, will serve to reduce fire hazards and provide general goals addressing fire safety standards and response times. The concentration of development in the core area will serve to improve fire protection services by concentrating the service area. The development along the waterfront will increase the need for various fire suppression facilities or equipment. Additional equipment to serve new development within city limits is called for by the *General Plan*. The impact is therefore, less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the *General Plan* are necessary.

5.6 SOLID WASTE COLLECTION AND DISPOSAL

ENVIRONMENTAL SETTING

Solid waste and hazardous waste collection and disposal services within the city are provided by franchised contractors. Solid waste is disposed at privately-owned landfill located east of the city at the end of Cummings Road. Within the city, on West Hawthorne Street, the operating company also maintains a transfer station. The landfill is expected to reach capacity around 2002. Humboldt County is conducting alternative disposal studies, including the consideration of an out-of-county transport and disposal program involving railroad facilities.

In June 1992, the City adopted its Source Reduction and Recycling Element. The element addresses diversion of various components of waste and establishes estimated percentages of diversion. Also in June 1992, the City adopted its Household Hazardous Waste Element. This element identifies three alternative collection programs for household hazardous waste (HHW). The alternative programs are:

- Expanded drop-off facility for recyclable HHW.
- Periodic drop-off days for HHW.
- Permanent HHW drop-off facility.

The City does not have a formal program for non-household hazardous waste collection or disposal, although it is working with Humboldt County in the development of a countywide program.

METHODOLOGY

Assumptions

- The City will continue to work with the Humboldt County Waste Management Authority, which will retain the lead role and responsibility for solid and hazardous waste disposal.
- The City will continue to perform its responsibilities within the city as they concern solid and hazardous waste planning and implementation.
- The City will participate in any long-term disposal option developed by the Humboldt County Waste Management Authority.

Thresholds of Significance

Appendix G to the *CEQA Guidelines* includes two thresholds of significance relevant to this topic; development under the *General Plan* will create environmentally significant impacts if either of the following occur:

- Published national, state, or local standards relating to solid waste or litter control are breached;
- Potential public health hazards are created involving the disposal of materials which pose a hazard to people, animals, or plants in the area affected.

For the purpose of this *EIR*, an impact is also considered significant if adoption or implementation of the *General Plan* would lead to waste generation that exceed the standards established by the City, significantly increases the depletion of the landfill, or significantly changes the location or operation of the present collection and disposal system.

IMPLICATIONS OF THE LAND USE DIAGRAM

Development according to the *General Plan* will result in an increase in waste generation from residential, commercial, and industrial development.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies to address solid and hazardous wastes.

Solid Waste Collection and Disposal

- 4.E.1. *The City shall require solid waste collection in all urban and suburban development.*
- 4.E.2. *The City shall promote maximum use of solid waste source reduction, recycling, composting, and environmentally-safe transformation of wastes.*
- 4.E.3. *The City shall require that all new development complies with applicable provisions of the Humboldt County Integrated Waste Management Plan and the City's Source Reduction and Recycling Plan.*

- 4.E.4. *The City shall encourage the development of regional and community-based recycling facilities in heavy commercial and industrial areas.*
- 4.E.5. *The City shall encourage businesses to use recycled products in their manufacturing processes and consumers to buy recycled products.*

Hazardous Materials and Toxic Contamination

- 7.E.1. *The City shall ensure that the use and disposal of hazardous materials in the Eureka area complies with local, state, and federal safety standards.*
- 7.E.2. *The City shall discourage the development of residences or schools near known hazardous waste disposal or handling facilities. Conversely, the City shall discourage the development of hazardous waste disposal or handling facilities near residences or schools.*
- 7.E.3. *The City shall require secondary containment and periodic examination for all storage of toxic materials.*
- 7.E.4. *The City shall ensure that industrial facilities are constructed and operated in accordance with current safety and environmental protection standards.*
- 7.E.5. *The City shall require that new industries that store and process hazardous materials provide a buffer zone between the installation and the property boundaries sufficient to protect public safety. The adequacy of the buffer zone shall be determined by the City.*
- 7.E.6. *The City shall require that applications for discretionary development projects that will generate hazardous wastes or utilize hazardous materials include detailed information on hazardous waste reduction, recycling, and storage.*
- 7.E.7. *The City shall require that any business that handles a hazardous material prepare a plan for emergency response to a release or threatened release of a hazardous material.*
- 7.E.8. *The City shall encourage the State Department of Health Services and the California Highway Patrol to review permits for radioactive materials on a regular basis and to promulgate and enforce public safety standards for the use of these materials, including the placarding of transport vehicles.*
- 7.E.9. *The City shall identify sites that are inappropriate for hazardous material storage, maintenance, use, and disposal facilities due to potential impacts on adjacent land uses and the surrounding natural environment.*
- 7.E.10. *The City shall work with local fire protection and other agencies to ensure an adequate countywide response capability to hazardous materials emergencies.*
- 7.E.11. *The City shall work with owners of property affected by toxic contamination to identify cost-effective approaches to remediation of contaminated soils. In particular, the City shall focus its efforts on developing unified strategies to addressing cleanup of large areas (e.g., the Westside Industrial Area, the waterfront area) so as to reduce the unit cost of remediation.*
- 7.E.12. *The City shall work with the Regional Water Quality Control Board and Humboldt County to identify and mitigate groundwater contamination caused by past disposal of toxic materials along the waterfront and in industrial areas.*

General Public Facilities and Services

4.A.10. *The City shall require that new development contribute its fair share to providing all public services and infrastructure, including schools, necessary to serve that development.*

IMPACTS

With the City's commitment to recycling and reducing wastes from all contributing land use components, coupled with the County's efforts in achieving an enhanced long-term disposal alternative, the increased waste should be accommodated and reduced to a level below significance.

Implementation of the *General Plan* will not have significant impacts upon the solid and hazardous waste collection and disposal systems.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the *General Plan*, along with the *Source Reduction and Recycling Element*, are necessary.

5.7 UTILITIES

ENVIRONMENTAL SETTING

Natural gas and electricity are provided within the Planning Area by Pacific Gas & Electric company (PG&E). PG&E is responsible for source development, transmission, and distribution of these resources. Within the city of Eureka, PG&E is solely responsible for these utility services.

Telephone service within the city is provided by Pacific Bell, with long distance service by AT&T, MCI, and Sprint. Cellular phone and other services are provided by various companies within the city. Cable television service is provided by Cox Cable.

METHODOLOGY

Assumptions

- The current service providers will continue to be responsible for serving future development within and adjacent to the city.
- The current service delivery structure may be augmented by additional service providers as the market may dictate and public utility regulators will allow.

Thresholds of Significance

Appendix G to the *CEQA Guidelines* contains two thresholds of significance relevant to utilities; development under the *General Plan* would create environmentally significant impacts if it resulted in:

- Encouraging activities which resulted in using large amounts of fuel or energy,
- Using fuel or energy in a wasteful manner.

For the purpose of this EIR, an impact is considered significant if adoption or implementation of the *General Plan* would create a demand that exceeded the current or feasibly expanded capacity of existing utility service providers.

IMPLICATIONS OF THE LAND USE DIAGRAM

Development under the *General Plan* may require the upgrade of local gas or electric lines or facilities, dependent upon the precise nature of the proposed use.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies that relate to privately-provided public utilities.

General Public Facilities and Services

- 4.A.2. *The City shall direct growth to those areas already served by public infrastructure and utilities.*
- 4.A.3. *The City shall require that all land designated for urban development be served by adequate water and other utilities necessary for health, safety, and welfare of citizens and property. Conversely, the City shall not provide urban utilities to areas that are not designated for urban development, particularly agricultural areas, wetland areas, forest lands, and areas with unsuitable topography.*
- 4.A.8. *The City shall promote undergrounding of overhead utility lines whenever feasible, particularly in recreational facilities, the Core Area, and new residential development.*
- 4.A.9. *The City shall require the undergrounding of all new utility services.*
- 4.A.10. *The City shall require that new development contribute its fair share to providing all public services and infrastructure, including schools, necessary to serve that development.*

IMPACTS

Development under the *General Plan* would require extensions and improvements to electric, gas, and telephone lines. Expansion of existing substations would also be required. Extensions and improvements to electrical, gas, cable television, and telephone lines would be funded by new development as it occurs, and specific improvements and extensions would be addressed in the area-wide planning process. The impact of the *General Plan* on gas, electricity, and telephone service would, therefore, be less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the *General Plan* are necessary.

5.8 SCHOOLS

ENVIRONMENTAL SETTING

The principal providers of primary and secondary school services and facilities within the *General Plan* area are the Eureka City School District, Cutten School District, and the South Bay Union School District. Together they operate 13 elementary, two secondary, and two high schools. Their services are supplemented by various private schools and by programs conducted by the Office of Education under the County Superintendent of Schools.

Projecting attendance of the schools is very difficult due, in part, to shifting demographics and the potential impacts to school attendance owing to decisions of major employers in the Eureka area. The school districts carefully monitor changes in the demand for services. Some of the facilities are reaching or exceeding their capacities, with the affected district planning accordingly.

METHODOLOGY

Assumptions

- The local school districts will continue to provide public education services within the planning area, with augmentation through private institutions and programs conducted under the County Superintendent of Schools.
- The school districts may have to assess the implementation of year-round school scheduling as an alternative to increasing the number or location of facilities in order to accommodate the incremental growth associated with development within the district.
- The school districts may request the imposition of development fees in support of improvements to school facilities, pursuant to existing state law.

Thresholds of Significance

Appendix G to the *CEQA Guidelines* includes a threshold of significance indicating that development under the *General Plan* would create a significant effect if it conflicted with adopted environmental plans and goals for the community. For the purpose of this *EIR*, an impact is considered significant if adoption or implementation of the *General Plan* would create a demand for school services that exceed the current or feasibly expanded capacity of the school district affected.

IMPLICATIONS OF THE LAND USE DIAGRAM

New development in Eureka could result in increased enrollment, which could require improvements or additions to school facilities within the respective school districts. It could also increase the demand for private primary and secondary educational facilities.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies to address school issues.

Schools

- 4.H.1 *The City should continue to support local school districts in providing quality education facilities that will accommodate projected changes in student enrollment.*
- 4.H.2 *The City shall encourage the provision of social, recreational, and educational services that complement and enrich those provided by public and private educational facilities.*
- 4.H.3 *The City shall work cooperatively with local school districts in monitoring housing, population, and school enrollment trends and in planning for future school facility needs, and shall assist the districts in identifying appropriate sites for new schools.*
- 4.H.4 *The City's land use planning should be coordinated with the planning of school facilities and should involve local school districts in the early stages of the land use planning process.*

- 4.H.5 *The City should plan and approve residential uses in those areas that are most accessible to school sites in order to enhance neighborhoods, minimize transportation requirements and costs, and minimize safety problems.*
- 4.H.6 *The City shall include schools among those public facilities and services that are considered an essential part of the infrastructure that should be in place as development occurs.*
- 4.H.7 *The City shall encourage school facility siting that establishes schools as focal points within the neighborhood and community.*
- 4.H.8 *The City shall encourage the location of schools in areas with safe pedestrian and bicycle access.*
- 4.H.9 *Whenever feasible, the City shall support and participate with local school districts in joint development of recreation areas, turf areas, and multi-purpose buildings.*
- 4.H.10 *The City shall support local school districts in using existing school facilities for non-school-related and child care activities.*
- 4.H.11 *The City should encourage use of schools as community centers to provide a range of services.*
- 4.H.12 *The City should require developers of new residential projects in the city to participate in providing sidewalks adjacent to arterials to ensure safe pedestrian/student travel to and from schools. The City should encourage Humboldt County to do likewise in unincorporated parts of the Planning Area.*
- 4.H.13 *The City should work with Humboldt County to provide streets and roads in the Planning Area that school buses can negotiate safely, including turn-around areas and safe passageways along embankments and grades.*

General Public Facilities and Services

- 4.A.10. *The City shall require that new development contribute its fair share to providing all public services and infrastructure, including schools, necessary to serve that development.*

IMPACTS

Development within the core area, especially residential, will impact the Eureka School District in general, and Jefferson Elementary School specifically. The anticipated increase in residences in the core area may create the need for additional bus service from this area to the secondary and high schools. The exact impacts must be monitored by the affected district as growth occurs. These impacts are considered to be less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the *General Plan* are necessary.

5.9 LIBRARY

ENVIRONMENTAL SETTING

The primary public library facility in Eureka is operated by the County of Humboldt at the new facility located at 1313 Third Street. The facility is a multi-story regional facility designed to eventually accommodate 225,000 volumes with an initial inventory of 175,000 volumes.

The Carnegie Building, located at Seventh and F streets, most recently served as the administrative headquarters for library operations. It is in the process of conversion to a regional arts and culture facility and is to undergo structural and other modifications.

METHODOLOGY

The County does not have any specific standards or guidelines pertaining to library space per capita or the number of volumes per capita. Operating as a special district under the governance of the Board of Supervisors, levels of service are established based upon the resources available at the time of the annual budget adoption.

Assumptions

The County of Humboldt will continue to maintain and operate the library system.

Thresholds of Significance

Appendix G to the *CEQA Guidelines* includes a threshold of significance indicating that development under the *General Plan* would create a significant impact if it conflicted with adopted environmental plans and goals for the community. For the purpose of this *EIR*, an impact is considered significant if adoption or implementation of the *General Plan* would exceed the increase demand for library services beyond the capacity of the County library system.

IMPLICATIONS OF THE LAND USE DIAGRAM

New development under the *General Plan* will create the demand for additional library services.

GENERAL PLAN POLICY RESPONSE

Since library services are not run by the City, the *Policy Document* does not include any policies that relate directly to the County libraries.

IMPACTS

The growth and concentration under the *General Plan* will create additional demand for library services, which are the responsibility of the County of Humboldt. The increase is not, however, enough to warrant a new library facility. The impact, therefore, of the *General Plan* on library services is considered less-than-significant.

MITIGATION MEASURES

No mitigation measures are necessary.

5.10 OTHER FACILITIES AND SERVICES

ENVIRONMENTAL SETTING

The City of Eureka is a charter city operating under a Council-Manager form of government. General government services are provided from the City Hall located at 531 K Street. Central garage functions are provided from 945 West 14th Street.

In addition to City offices, Eureka, as the seat of Humboldt County, contains various county, state, and federal offices or activities. The largest of the offices or activities is the County Courthouse. The Courthouse is located one block west and one block north of City Hall and provides office and other space for the services of numerous County functions. The County has recently expanded its correctional facilities to the block east of the Courthouse. Future plans include the development of new court facilities on the same block, with social or health services possibly being consolidated in the block located to the south of the Courthouse.

METHODOLOGY

Assumptions

- The general government functions of the City will remain in its present location. If additional space is required, it will be provided at or adjacent to the existing City Hall.
- The County of Humboldt will maintain its operations in its present location with additions possible to the east and south.

Thresholds of Significance

Appendix G to the *CEQA Guidelines* includes a threshold of significance indicating that development under the *General Plan* would create a significant impact if it conflicted with adopted environmental plans and goals for the community. For purposes of this *EIR*, an impact is considered significant if adoption or implementation of the *General Plan* would result in the approval of development for which general governmental services are not available or inadequate.

IMPLICATIONS OF THE LAND USE DIAGRAM

The implementation of the *General Plan* may incrementally increase the demand for general government services in the areas of community development, engineering and utility services.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies that pertain to the provision of general government services:

General Public Facilities and Services

- 4.A.1 *The City shall provide high quality public facilities, utilities, and services throughout the urbanized area of Eureka and shall ensure that such facilities, utilities, and services are compatible with surrounding development.*
- 4.A.2 *The City shall direct growth to those areas already served by public infrastructure and utilities.*

- 4.A.3 *The City shall require that all land designated for urban development be served by adequate water and other utilities necessary for health, safety, and welfare of citizens and property. Conversely, the City shall not provide urban utilities to areas that are not designated for urban development, particularly agricultural areas, wetland areas, forest lands, and areas with unsuitable topography.*
- 4.A.4 *The City declares that existing public works facilities, including water, wastewater, stormwater, highway, and railroad facilities serving the Planning Area are essential to the economic and social well-being of the people and shall be maintained, enhanced, and restored to assure the orderly and balanced utilization and conservation of natural and human-created resources.*
- 4.A.5 *The City shall permit the formation or expansion of special districts where assessment for, and provision of, the services will not induce development inconsistent with this General Plan.*
- 4.A.6. *The City shall ensure that new or expanded public works facilities within the Coastal Zone will be designed and limited to accommodate needs generated by permitted uses and development consistent with the provisions of this General Plan.*
- 4.A.7. *Within the Coastal Zone, the City shall prohibit the extension of urban services (sewer and water) into areas with Open Space designations (i.e., Agricultural, Timberland, Natural Resources, Water--Development, and Water--Conservation), except that the water system intertie line in the southwestern part of the city shall be permitted to extend into these areas, provided no connections for private users shall be allowed.*
- 4.A.10. *The City shall require that new development contribute its fair share to providing all public services and infrastructure, including schools, necessary to serve that development.*

IMPACTS

Implementation of the policies and programs of the *General Plan* will ensure that the City will be able to maintain an acceptable level of general government services. The impact on such services is, therefore, considered less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the *General Plan* are necessary.

CHAPTER 6

NATURAL ENVIRONMENT

This chapter examines the *General Plan's* impacts on natural resources. The chapter covers water resources; agricultural/timberland resources; wildlife habitat areas; special-status species; and air quality impacts.

6.1 WATER RESOURCES

ENVIRONMENTAL SETTING

The environmental setting of the Planning Area is presented in detail in Chapter 9 of the *Background Report*. The setting information below is synopsized from the more detailed presentations in the *Background Report*.

The Planning Area includes significant water or aquatic resources. Major watersheds in the Planning Area include Freshwater Creek, Ryan Creek (a major tributary to Freshwater Creek just east of the city limits), and the Elk River. The terrace on which the city is located is drained by several smaller streams, including First, Second, and Third Sloughs, which drain the northern part of the city into Eureka Slough; and Martin Slough, which drains nearly all of the city and the adjacent unincorporated areas south of Harris Street into the Elk River. Eureka Slough is also the pathway for drainage into Humboldt Bay from the low-lying diked former tidelands northeast of the city.

The city incorporates a significant portion of Humboldt Bay within its city limits. Humboldt Bay is a large marine embayment, the second largest in California after San Francisco Bay.

Groundwater resources under the city are relatively limited, owing to the low permeability of many of the sediments in the Planning Area. Groundwater in some parts of the Planning Area with relatively dense residential development contains high levels of bacteria and nitrogen; these areas have often required connection to an external water supply in order to have adequate potable water. The water supplies for the Planning Area are largely derived from surface water sources outside of the Planning Area. The Humboldt Community Services District does, however, operate three groundwater wells in the southwestern part of the Planning Area.

METHODOLOGY

This section identifies the assumptions made in addressing the *General Plan's* potential for impacts on water resources, together with the thresholds of significance adopted in this assessment.

Assumptions

- Development will occur consistent with the assumptions in Chapter 2; the impacts discussed in this section are based on the likely effects of construction of this projected development. The assessments are based on qualitative programmatic conclusions about impacts which typically arise from such actions.
- In addition to development inside the city, development will also occur in parts of the Planning Area outside of the city, and will be governed by the appropriate County planning policies. This development may contribute to potential cumulative effects in combination with existing development and development in the city.
- Existing laws which protect the natural environment, especially those enacted at the state and federal levels, will continue to provide the protections of the natural environment that exist at this time (see the

Background Report for a summary of these laws). If these laws were substantially weakened, then the assessment of the *General Plan's* effects presented below would not reflect the plan's actual effects on the environment.

- In addition to existing law provisions affecting environmental protection, this analysis assumes an increased interest at federal, state, and local levels on "nonpoint source" (NPS) water pollution and appropriate programmatic approaches to reducing what is generally recognized as the most important current cause of degradation of the quality of the nation's waters.
- This *EIR* assumes a continued local interest in "port development" for Humboldt Bay, including developing new or expanded facilities for commercial shipping through Humboldt Bay; where such port development involves City participation or approval, it is assumed to occur under the policies identified in the *General Plan*.
- Based on recently publicized proposals by the City of Eureka to consider a "greenway" system of pedestrian, equestrian, and/or bicycle pathways in the canyons of the sloughs draining the Eureka terrace (i.e., the "gulches"), this *EIR* assumes that there will be increased interest in such programs, which will be reviewed by the City under the policies identified in the *General Plan*.

Thresholds of Significance

Appendix G to the *CEQA Guidelines* includes a number of specific "thresholds" of environmental significance which apply to the contents of this section. Development under the *General Plan* will produce significant environmental effects if one or more of the following occur:

- A substantial degradation in surface or groundwater water quality, which may be indicated best by a violation of state or federal water quality standards;
- Any substantial diminution in the amount of habitat for fish or wildlife, including aquatic habitat (see also Section 6.3).

In addition to the Appendix G tests of significance, this *EIR* adopts the following test of significance; the *General Plan* will have significant environmental effects if its implementation results in:

- Any substantial alteration of wetlands or agricultural lands contrary to the requirements of the California Coastal Act (i.e., alterations which cannot be found to be consistent with the requirements of the Coastal Act), or any alteration of wetlands or "special aquatic sites" contrary to the requirements of the federal Clean Water Act.

IMPLICATIONS OF THE LAND USE DIAGRAM

The *Land Use Diagram* projects generalized land uses with the Planning Area; it does not identify specific projects or details of the land uses which could be used to make precise predictions of environmental impact. The implications of the Land Use Diagram are therefore relatively imprecise and policy-oriented.

Residential development under the *General Plan*, especially development in the "gulches" (including Martin Slough and First, Second, and Third Sloughs, which are included in areas designated "LDR"), will encroach on natural waterways in the Planning Area, with resulting indirect effects on habitat functions (see below). New residential development in the Planning Area, particularly development outside of city limits, will produce increases in runoff which must be channeled through these natural drainageways, most likely leading to either erosion or sediment deposition in the waterways and losses in aquatic habitat values; this is a cumulative concern. New development also is likely to lead to increases in nonpoint source pollutants

typically associated with such development, with potential impacts on water quality; this is also a cumulative concern.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies that relate to water resources:

Stormwater Drainage

- 4.D.2. *The City shall encourage the use of natural stormwater drainage systems in a manner that preserves and enhances natural features.*
- 4.D.3. *The City shall support efforts to acquire land or obtain easements for drainage and other public uses of floodplains where it is desirable to maintain stream courses in a natural state.*
- 4.D.4. *The City shall consider recreational opportunities and aesthetics in the design of stormwater detention/retention and conveyance facilities.*
- 4.D.5. *The City shall promote sound soil conservation practices and carefully examine the impact of proposed urban developments with regard to water quality and effects on drainage courses.*
- 4.D.6. *The City shall improve the quality of runoff from urban and suburban development through use of appropriate and feasible mitigation measures including, but not limited to, artificial wetlands, grassy swales, infiltration/sedimentation basins, riparian setbacks, oil/grit separators, and other best management practices (BMPs).*
- 4.D.7. *The City shall require new development that would increase storm drainage runoff in a 10-year storm event more than one cubic foot per section to provide retention/siltation basins to limit new runoff to prior-to-development flows.*
- 4.D.8. *The City shall encourage new project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions.*
- 4.D.9. *The City shall require new projects that affect the quantity or quality of surface water runoff to allocate land as necessary for the purpose of detaining post-project flows and/or for the incorporation of mitigation measures for water quality impacts related to urban runoff. To the maximum extent feasible, new development shall not produce a net increase in peak stormwater runoff.*
- 4.D.10. *In the Martin Slough drainage, the City shall cooperate with Humboldt County and affected landowners to minimize potential damage and economic loss arising from stormwater runoff, consistent with other policies of this General Plan.*

Aquatic Resources and Marine, Wetland, and Riparian Habitat

- 6.A.1. *The City shall maintain, enhance, and, where feasible, restore valuable aquatic resources, with special protection given to areas and species of special biological or economic significance. The City shall require that uses of the marine environment are carried out in the manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*
- 6.A.2. *The City shall establish a comprehensive wetland management program that includes all of Eureka's restored and natural wetland areas.*

- 6.A.3. *The City shall maintain and, where feasible, restore biological productivity and the quality of coastal waters, streams, wetlands, and estuaries appropriate to maintain optimum populations of aquatic organisms and for the protection of human health through, among other means, minimizing adverse effects of wastewater and stormwater discharges and entrainment, controlling the quantity and quality of runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging wastewater reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*
- 6.A.4. *The City shall require that channelizations or other substantial alterations that could significantly disrupt the habitat values of rivers and streams incorporate the best mitigation measures feasible. Such channelizations and alterations shall be limited to the following:*
- a. Flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development;*
 - b. Developments where the primary function is the improvement of fish and wildlife habitat.*
- 6.A.5. *The City shall permit revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes only when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion.*
- 6.A.6. *The City declares the following to be environmentally sensitive habitat areas within the Coastal Zone:*
- a. Rivers, creeks, sloughs, gulches and associated riparian habitats, including, but not limited to Eureka Slough, Fay Slough, Cut-Off Slough, Freshwater Slough, Cooper Slough, Second Slough, Third Slough, Martin Slough, Ryan Slough, Swain Slough, and Elk River.*
 - b. Wetlands and estuaries, including that portion of Humboldt Bay within the City's jurisdiction, riparian areas, and vegetated dunes.*
 - c. Indian Island, Daby Island, and the Woodley Island wildlife area.*
 - d. Other unique habitat areas, such as waterbird rookeries, and habitat for all rare, threatened, or endangered species on state or federal lists.*
 - e. Grazed or farmed wetlands (i.e., diked former tidelands).*

The areas are shown on 1:500 scale maps that are available for review at the City of Eureka Community Development Department. These maps are incorporated by reference into this General Plan and are a formal part of it. However, all environmentally sensitive habitat areas may not be shown on these maps and shall, if they exist, be identified as part of any project application.

- 6.A.7. *Within the Coastal Zone, the City shall ensure that environmentally sensitive habitat areas are protected against any significant disruption of habitat values, and that only uses dependent on such resources shall be allowed within such areas. The City shall require that development in areas adjacent to environmentally sensitive habitat areas be sited and designed to prevent impacts which would significantly degrade such areas, and be compatible with the continuance of such habitat areas.*
- 6.A.8. *Within the Coastal Zone, prior to the approval of a development, the City shall require that all development on lots or parcels designated NR (Natural Resources) on the Land Use Diagram or within 250 feet of such designation, or development potentially affecting an environmentally sensitive habitat area, shall be found to be in conformity with the applicable habitat protection policies of the General Plan. All development plans, drainage plans, and grading plans submitted as part of an application shall show the precise location of the habitat(s) potentially affected by the proposed project and the manner in which they will be protected, enhanced, or restored.*

- 6.A.9. The City shall permit the diking, filling, or dredging of open coastal waters, wetlands, or estuaries only under the following conditions:
- The diking, filling or dredging is for a permitted use in that resource area;
 - There is no feasible, less environmentally damaging alternative;
 - Feasible mitigation measures have been provided to minimize adverse environmental effects;
 - The functional capacity of the resource area is maintained or enhanced.
- 6.A.10. The City shall support dredging and spoils disposal to avoid significant disruption to aquatic and wildlife habitats and water circulation.
- 6.A.11. The City shall require that diking, filling or dredging of a wetland or estuary maintain or enhance the functional capacity of these resources. Functional capacity means the ability of the wetland or estuary to be self-sustaining and to maintain natural species diversity. In order to establish that the functional capacity is being maintained, all of the following must be demonstrated.
- Presently-occurring plant and animal populations in the ecosystem will not be altered in a manner that would impair the long-term stability of the ecosystem, i.e., natural species diversity, abundance and composition are essentially unchanged as the result of the project;
 - A species that is rare, threatened, or endangered will not be significantly adversely affected; and
 - Consumptive (e.g., fishing, aquaculture and hunting) or nonconsumptive (e.g., water quality and research opportunity) values of the wetland or estuary ecosystem will not be significantly reduced.
- 6.A.12. The City shall require that dredging, when consistent with the provisions of this General Plan or other adopted City regulations and where necessary for the maintenance of the tidal flow and continued viability of the wetland habitat or for flood control purposes, shall be subject to the following conditions:
- Dredging shall be prohibited in breeding and nursery areas and during periods of fish migration and spawning.
 - Dredging shall be limited to the smallest area feasible.
 - Designs for dredging and excavation projects shall include protective measures such as silt curtains, weirs, etc., to protect water quality in adjacent areas during construction by preventing the discharge of refuse, petroleum spills, and unnecessary dispersal of silt materials.
- 6.A.13. The City shall require that diking or filling of a wetland that is otherwise in accordance with the policies of this General Plan, shall, at a minimum, require the following mitigation measures:
- A detailed restoration plan shall be required as part of the project application for each specific restoration site. The restoration plan shall include provisions for purchase, if required, and restoration of an equivalent area of equal or greater biological productivity, and dedication of the land to a public agency or other method which permanently restricts the use of the site to habitat and open space purposes. The restoration site shall be purchased or otherwise made available prior to any permitted diking or filling;
 - Areas adequate to maintain functional capacity shall be opened to tidal action or other sources of surface water shall be provided. This provision shall apply to diked or filled areas which themselves are not environmentally sensitive habitat areas, but would become so if, as part of a restoration program, they are opened to tidal action or provided with other sources of surface water. All of the provisions for restoration, purchase (if necessary), and dedication described under item a of this policy shall apply to any program or activity performed pursuant to this policy.
 - Mitigation shall, to the maximum extent feasible, be of the same type as the wetland to be filled (i.e., freshwater marsh for freshwater marsh, saltwater marsh for saltwater marsh, etc.).

- d. Where no suitable private or public restoration or enhancement sites are available, an in-lieu fee may be required to be paid to an appropriate public agency for use in the restoration or enhancement of an area of equivalent productive value or surface area.
- 6.A.14. Consistent with all other applicable policies of this General Plan, the City shall limit development or uses within wetlands that are neither farmed nor grazed, or within estuaries, to the following:
- a. Port facilities.
 - b. Energy facilities.
 - c. Coastal-dependent industrial facilities, including commercial fishing facilities.
 - d. Maintenance of existing or restoration of previously dredged depths in navigation channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
 - e. Incidental public service purposes which temporarily impact the resources of the area, such as burying cables or pipes, inspection of piers, and maintenance of existing intake and outfall lines.
 - f. Restoration projects.
 - g. Nature study, aquaculture, or similar resource-dependent activities.
 - h. New or expanded boating facilities in estuaries, consistent with the demand for such facilities.
 - i. Placement of structural piling for public recreational piers that provide public access and recreational opportunities.
- 6.A.15. The City shall limit uses and development in grazed or farmed wetlands to the following:
- a. Agricultural operations limited to accessory structures, apiaries, field and truck crops, livestock raising, greenhouses (provided they are not located on slab foundations and crops are grown in the existing soil on site), and orchards;
 - b. Farm-related structures, including barns, sheds, and farmer-occupied housing, necessary for the performance of agricultural operations. Such structures may be located on an existing grazed or farmed wetland parcel only if no alternative upland location is available for such purpose and the structures are sited and designed to minimize adverse environmental effects on the farmed wetland. No more than one permanent residential structure per parcel shall be allowed.
 - c. Restoration projects, including the PALCO on-site restoration and enhancement program.
 - d. Nature study, aquaculture, and similar resource-dependent activities; and,
 - e. Incidental public service purposes which may temporarily impact the resources of the area, such as burying cables or pipes.
- 6.A.16. Consistent with all other applicable policies of this General Plan, the City shall limit uses within open coastal waters to the following:
- a. Port facilities.
 - b. Energy facilities.
 - c. Coastal-dependent industrial facilities, such as commercial fishing facilities.
 - d. Maintenance of existing or restoration of previously dredged depths in navigation channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
 - e. Incidental public service purposes which temporarily impact the resources of the area, such as burying cables and pipes, inspection of piers, and maintenance of existing intake and outfall lines.
 - f. Restoration projects.
 - g. Nature study, aquaculture, or similar resource-dependent activities.
 - h. New or expanded boating facilities.
 - i. Placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

- 6.A.17. The City shall require that any uses that involve substantial alterations of streams and rivers incorporate the best mitigation measures feasible and shall be limited to the following:
- a. Flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect development.
 - b. Developments where the primary function is the improvement of fish and wildlife habitat.
- 6.A.18. The City may permit new fill for repair and maintenance purposes on lands adjacent to the previously filled northern waterfront provided that it is consistent with other General Plan policies and where all of the following apply:
- a. Fill will be placed in previously filled areas which have been subject to erosion;
 - b. Fill will not be placed beyond the existing bulkhead line;
 - c. Fill is necessary to protect existing development, coastal-dependent uses, or redeveloped areas from erosion;
 - d. Fill will not interfere with commercial fishing activities and facilities; and
 - e. Placement of the fill is consistent with the coastal public access policies of the General Plan.
- 6.A.19. The City shall require establishment of a buffer for permitted development adjacent to all environmentally sensitive areas. The minimum width of a buffer shall be 100 feet, unless the applicant for the development demonstrates on the basis of site specific information, the type and size of the proposed development, and/or proposed mitigation (such as planting of vegetation) that will achieve the purposes(s) of the buffer, that a smaller buffer will protect the resources of the habitat area. As necessary to protect the environmentally sensitive area, the City may require a buffer greater than 100 feet. The buffer should be measured horizontally from the edge of the environmentally sensitive area nearest the proposed development to the edge of the development nearest the environmentally sensitive area. Maps and supplemental information submitted as part of the application shall be used to specifically define these boundaries.
- 6.A.20. To protect urban wetlands against physical intrusion, the City shall require that wetland buffer areas incorporate attractively designed and strategically located barriers and informational signs.
- 6.A.21. The City shall require that all land use activities adjacent to gulch greenways be carried out in a manner that avoids vegetative removal below the break in slope (usually those areas with a slope of 30 percent or greater) and that does not alter natural land forms and drainage patterns.
- 6.A.22. The City shall maintain Indian Island as a site for habitat, scientific research and education. Existing uses may be maintained but shall not be expanded, except that reburial of Native American remains shall be permitted as part of the mitigation for coastal-dependent industrial development elsewhere in the Planning Area.
- 6.A.23. The City, in consultation with the Department of Fish and Game, Coastal Conservancy, Coastal Commission, Humboldt County, Humboldt Bay Harbor, Recreation, and Conservation District, affected landowners, and other interested parties shall prepare a detailed, implementable wetlands management, restoration and enhancement program consistent with the provisions of this General Plan. The objectives of the program shall be to enhance the biological productivity of wetlands; to minimize or eliminate conflicts between wetlands and adjacent urban uses; to provide stable boundaries and buffers between urban and habitat areas; to provide restoration areas, including the City-owned lands on the Elk River Spit that may benefit from restoration and enhancement, to serve as mitigation in conjunction with future projects that may include wetland areas. Upon completion, the wetlands management and restoration program created by this policy shall be submitted to the Coastal Commission for review and approval.

6.A.24. Within the Coastal Zone, where there is a question regarding the boundary, buffer requirements, location, or current status of an environmentally sensitive area identified pursuant to the policies of this General Plan, the City shall require the applicant to provide the City with the following:

- a. Base map delineating topographic lines, adjacent roads, location of dikes, levees, of flood control channels and tide gates, as applicable;
- b. Vegetation map, including identification of species that may indicate the existence or non-existence of the sensitive environmental habitat area;
- c. Soils map delineating hydric and non-hydric soils; and
- d. Census of animal species that may indicate the existence or non-existence of the sensitive environmental habitat area.

The City shall transmit the information provided by the applicant pursuant to this policy to the Department of Fish and Game for review and comment. Any comments and recommendations provided by the Department shall be immediately sent to the applicant for his or her response. The City shall make its decision concerning the boundary, location, or current status of the environmentally sensitive habitat area in question based on the substantial evidence in the record and shall adopt findings to support its actions.

Conservation of Open Space

- 6.C.1. The City shall preserve vital portions of open-space areas around and within the city in their natural state in order to insure their maintenance as wildlife and fish habitat areas, natural drainage areas, agricultural areas, and areas of passive recreation and outdoor education.
- 6.C.2. The City shall protect critical habitat areas and preserve the ecosystem of existing natural areas within city.
- 6.C.3. The City shall retain open-space needed to provide community and neighborhood identity, efficiency and amenities including insulate conflicting land uses and act as a noise barrier between noise-sensitive excessive noise-generating uses.
- 6.C.4. The City shall coordinate its open space planning, acquisition, and development efforts with those of Humboldt County and regional and state agencies.
- 6.C.5. The City shall prepare and adopt Gulch Greenways Preservation/Management Guidelines that identifies and protects the vegetation and habitat in and the hydrologic capacity of Eureka's gulch greenways. These guidelines shall include provisions for defining the boundaries of gulch greenways, as generally indicated in Figure 6-1, identifying the boundaries of all affected parcels lying wholly or partly within the gulch greenways, ensuring new development is compatible with the environmental and public safety values of the gulch greenways, and restoring gulch vegetation and habitat as appropriate.
- 6.C.6. The City shall permit private property owners adjacent to gulch greenway areas to develop, where appropriate, by utilizing Planned Unit Development (PUD) concepts while ensuring that gulch slopes and bottoms are retained in their natural state and that development does not occur in areas subject to flooding or where slopes exceed 30 percent.
- 6.C.7. The City shall require that areas of unique historic and scenic quality and areas containing identified critical habitats be preserved.
- 6.C.8. The City shall encourage multiple use of open-space resources consistent with other policies and standards of this General Plan.

IMPACTS

The policies incorporated into the *General Plan* address the potential effects of development inside the city limits on erosion, sediment, nonpoint source pollutants, and other water quality concerns. Implementing the policies will either avoid these impacts or reduce them to a less-than-significant-level. As areas outside the city are annexed to the city in the future, the extension of the policies to the additional areas will address these concerns in the added areas.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the *General Plan* are necessary.

6.2 AGRICULTURAL AND TIMBERLAND RESOURCES

ENVIRONMENTAL SETTING

The low-lying diked former tideland areas south and northeast of the Eureka terrace remain in agricultural use, primarily in grazing. These areas, which are located outside of the Eureka city limits, are sited on relatively impermeable soils, which have been classified under an older classification system as "prime." Other agricultural uses in the Planning Area include relatively limited areas of orchard crops, and scattered examples of animal boarding and localized grazing inside built-up areas, such as parts of the Martin Slough basin. The uses are located predominantly outside of the city limits.

Several of the upland soils types present in the Planning Area have been rated as among the best forestland soils in the world for commercial tree-growing purposes, and the unincorporated part of the Planning Area contains substantial land areas with timber cover. Most of these tree-covered areas are east and southeast of the city limits.

METHODOLOGY

Assumptions

- Development will occur consistent with the assumptions in Chapter 2; the impacts discussed in this section are based on the likely effects of construction of this projected development. The assessments are based on qualitative programmatic conclusions about impacts which typically arise from such actions.
- In addition to development inside the city, development will also occur in parts of the Planning Area outside of the city, and will be governed by the appropriate County planning policies. This development may contribute to potential cumulative effects in combination with existing development and development in the city.
- Existing laws which protect the natural environment, especially those enacted at the state and federal levels, will continue to provide the protections of the natural environment that exist at this time (see the *Background Report* for a summary of these laws). If these laws were substantially weakened, then the assessment of the *General Plan's* effects presented below would not reflect the plan's actual effects on the environment.

Thresholds of Significance

Appendix G to the CEQA Guidelines includes a number of specific "thresholds" of environmental significance which apply to the contents of this section. Implementing the *General Plan* will produce significant environmental effects if one or more of the following occur:

- The conversion of prime agricultural land to nonagricultural uses, or the impairment of agricultural productivity on prime agricultural land.

In addition to the Appendix G tests of significance, this *EIR* adopts the following additional tests of significance; the *General Plan* will have significant environmental effects if its implementation results in:

- Any substantial alteration of wetlands or agricultural lands contrary to the requirements of the California Coastal Act (i.e., alterations which cannot be found to be consistent with the requirements of the Coastal Act), or any alteration of wetlands or "special aquatic sites" contrary to the requirements of the federal Clean Water Act.

IMPLICATIONS OF THE LAND USE DIAGRAM

Areas designated "LDR" in the Martin Slough drainage include areas currently in agricultural uses, with a potential for pressure to convert these uses. Residential land use designations, mostly outside city limits in the Ridgewood Heights and the Mitchell Road/Pigeon Point areas, include substantial areas currently in forestry-related land uses, including some areas carrying Timber Production Zone designations at the present time; these designations potentially could result in cumulative losses in timberland areas. To the extent that aquaculture in Humboldt Bay and fishing in the region including Humboldt Bay are considered "agricultural" uses, port development proposals have a potential for affecting existing and future fishing and aquacultural uses of the Planning Area.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies related to agricultural land and timberland.

Agricultural Preservation

- 6.B.1. *The City shall not approve non-agricultural development on agricultural lands with Class I or Class II soils within the Planning Area.*
- 6.B.2. *The City shall require the retention in agricultural use of agricultural lands within the Coastal Zone with soils other than Classes I or II in agricultural use, except under the following conditions:*
 - a. *Continued or renewed agricultural use is demonstrated to be infeasible,*
 - b. *Conversion to urban uses would locate development within, contiguous with, or in close proximity to, existing developed areas, or*
 - c. *Farmed wetlands are proposed and funded through a wetland management and restoration program for restoration of resource-dependent activities.*
- 6.B.3. *The City shall limit uses in grazed or farmed wetlands to the following:*
 - a. *Agricultural operations (except for greenhouses on slab foundations).*
 - b. *Farm-related structures (including barns, sheds, and farmer-occupied housing) necessary for the continuance of the agricultural operation. Such structures may be located on an existing grazed or farmed wetland parcel only if no alternative upland location is available for such purpose and the structures are*

sited and designed to minimize the adverse environmental effects on the farmed wetland. No more than one primary residential structure per parcel shall be allowed.

- c. Restoration and enhancement projects.
- d. Nature study, aquaculture, and similar resource-dependent activities.
- e. Incidental public service purposes which may temporarily impact the resources of the area, such as burying cable and pipes.

6.B.4. The City shall ensure that expansion of public services and public service facilities, which is otherwise consistent with the provisions of this General Plan, does not reduce agricultural viability through increased assessment costs.

6.B.5. Consistent with the Coastal Act (California Resources Code Section 30250(a)), the City shall prohibit land division of existing agriculturally-designated land within the Coastal Zone, other than for leases for agricultural uses.

Timber Resources

6.D.1. The City shall work with Humboldt County and the California Department of Forestry and Fire Protection (CDF) to encourage the sustained productive use of timberland as a means of providing open space and conserving other natural resources.

6.D.2. The City shall work with Humboldt County and the California Department of Forestry and Fire Protection (CDF) to discourage development that conflicts with timberland management.

6.D.3. The City shall encourage and promote the productive use of wood waste generated in the Eureka area

IMPACTS

The policies included in the *General Plan* address the protection of agricultural and timberland resources during development; implementing these policies will avoid impacts to these resources. The impact of the *General Plan* on agricultural and timber resources, is thus considered less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the *General Plan* are necessary.

6.3 BIOLOGICAL HABITATS AND WILDLIFE

ENVIRONMENTAL SETTING

The Planning Area provides habitat for a large variety of animal and plant species. Major habitat types include forests, both coniferous and deciduous; grasslands; water-related habitats, including streams, wetlands, riparian areas, and tidewater or estuarine and marine ecosystems; dunelands; and rocky shore areas. Wildlife habitat values correlate with habitat structural diversity, and the forestlands and wetland habitat types provide habitat for the greatest numbers of wildlife species.

The intermixture of the wildland habitats with development creates a context where wildlife may interact with people and their possessions. While many residents find this intermixture desirable, in most cases this land use pattern results in problems because of wildlife damage to property or livestock. It remains that rural development densities do not prevent an area for providing wildlife habitat values.

The intermixture of people and wildland areas also increases the introduction of exotic (i.e., non-native) organisms into natural environments, which has consistently led to invasiveness problems and to simplifications of the native ecosystems. This is particularly a concern for the aquatic ecosystem in Humboldt Bay, which is currently the most biologically diverse estuarine ecosystem in western North America, and which plays several roles of major importance in biological phenomena (such as shorebird migration) of international scope.

METHODOLOGY

Assumptions

- Development will occur consistent with the assumptions in Chapter 2; the impacts discussed in this section are based on the likely effects of construction of this projected development. The assessments are based on qualitative programmatic conclusions about impacts which typically arise from such actions.
- In addition to development inside the city, development will also occur in parts of the Planning Area outside of the city, and will be governed by the appropriate County planning policies. This development may contribute to potential cumulative effects in combination with existing development and development in the city.
- Existing laws which protect the natural environment, especially those enacted at the state and federal levels, will continue to provide the protections of the natural environment that exist at this time (see the *Background Report* for a summary of these laws). If these laws were substantially weakened, then the assessment of the *General Plan's* effects presented below would not reflect the plan's actual effects on the environment.
- This *EIR* assumes a continued local interest in "port development" for Humboldt Bay, including developing new or expanded facilities for commercial shipping through Humboldt Bay; where such port development involves City participation or approval, it is assumed to occur under the policies identified in the *General Plan*.
- Based on recently publicized proposals by the City of Eureka to consider a "greenway" system of pedestrian, equestrian, and/or bicycle pathways in the canyons of the sloughs draining the Eureka terrace (i.e., the "gulches"), this *EIR* assumes that there will be increased interest in such programs, which will be reviewed by the City under the policies identified in the *General Plan*.

Thresholds of Significance

Appendix G to the *CEQA Guidelines* includes a number of specific "thresholds" of environmental significance which apply to the contents of this section. Development under the *General Plan* will produce significant environmental effects if one or more of the following occur:

- A substantial effect on a rare, threatened, or endangered plant or animal species, which is biologically most likely to result from habitat loss, so that an effect on habitat for such species is also significant;
- Any substantial interference with the movements of individuals of one or more resident or migratory fish or wildlife species;
- Any substantial diminution in the amount of habitat available for fish, wildlife, or plants in general (i.e., not considering just rare, threatened, or endangered species).

In addition to the Appendix G tests of significance, this *EIR* adopts the following additional tests of significance; the *General Plan* will have significant environmental effects if its implementation results in:

- Any substantial alteration of wetlands or agricultural lands contrary to the requirements of the California Coastal Act (i.e., alterations which cannot be found to be consistent with the requirements of the Coastal Act), or any alteration of wetlands or "special aquatic sites" contrary to the requirements of the federal Clean Water Act;
- A substantial alteration in the biological diversity of local ecosystems, caused either by the loss of native organisms or by the introduction of non-native organisms, resulting in substantial changes in the composition, structure, or function of the native ecosystems.

IMPLICATIONS OF THE LAND USE DIAGRAM

The extensive land areas designated for residential development, many of which are outside city limits, which currently support timberland and agricultural uses and related wildlife habitat functions could be associated with losses in those habitat values, as well as to conflicts between future residents and the remnant wildlife populations in these areas.

Within the city limits, the gulches that are given residential land use designations on the Land Use Diagram provide the remnant primary wildlife habitats in much of the city, and development will reduce the habitat values and could interfere with wildlife movement through the Planning Area. Development of trails within the city's gulches could also adversely affect wildlife habitats.

Port development proposals for Humboldt Bay could also be associated with losses of aquatic wildlife habitat values with the Planning Area.

GENERAL PLAN POLICY RESPONSE

The policies cited in Section 6.1, Water Resources, would also apply to special-status species.

IMPACTS

The policies included in the *General Plan* address concerns for biological and wildlife habitats. In particular, policies concerning development in and around the city's gulch greenways will preempt disturbance of the biological and wildlife habitat values of these areas. As a result, the biological and wildlife habitat impacts associated with implementation of the *General Plan* are considered less-than-significant.

While the *General Plan* does not identify specific port-related development projects that could potentially affect the aquatic wildlife habitat of Humboldt Bay, the City should be aware of the potential habitat degradation associated with port development projects.

MITIGATION MEASURES

No additional mitigation measures are necessary to address biological and wildlife habitat impacts associated with implementation of the *General Plan*. The potential effects of exotic species on the habitats of aquatic organisms in Humboldt Bay may require future action by the City to adopt measures promulgated by other agencies.

6.4 SPECIAL-STATUS SPECIES AND ECOSYSTEMS

ENVIRONMENTAL SETTING

The Planning Area contains recorded occurrences of at least 14 plant or animal species currently considered as sensitive under state or federal laws, with potential occurrences of up to a dozen additional species. More significantly, the Planning Area contains the habitats for these species. Many of these habitats are ecosystems with special status under state or federal law.

Impacts to wetlands are regulated by the California Coastal Act and the federal Clean Water Act. The diked former tidelands south and northeast of the city, the watercourses flowing through the Planning Area, Humboldt Bay and its bordering marshes, and a number of localized areas elsewhere in the Planning Area are wetlands under these laws. For similar reasons the sand dune environments in the Planning Area, principally on the Samoa Peninsula and the Elk River spit, have been identified as areas of environmental significance and developmental sensitivity.

The currently recognized participation of Humboldt Bay in a number of phenomena that take place across international borders has raised the biological and ecological significance of Humboldt Bay as a key area of biological diversity, both locally and internationally. In this *EIR*, Humboldt Bay is recognized as a key "special-status" ecosystem type.

METHODOLOGY

Assumptions

- Development will occur consistent with the assumptions in Chapter 2; the impacts discussed in this section are based on the likely effects of construction of this projected development. The assessments are based on qualitative programmatic conclusions about impacts which typically arise from such actions.
- In addition to development inside the city, development will also occur in parts of the Planning Area outside of the city, and will be governed by the appropriate County planning policies. This development may contribute to potential cumulative effects in combination with existing development and development in the city.
- Existing laws which protect the natural environment, especially those enacted at the state and federal levels, will continue to provide the protections of the natural environment that exist at this time (see the *Background Report* for a summary of these laws). If these laws were substantially weakened, then the assessment of the *General Plan's* effects presented below would not reflect the plan's actual effects on the environment.

Thresholds of Significance

Appendix G to the CEQA Guidelines includes a number of specific "thresholds" of environmental significance which apply to the contents of this section. Implementing the *General Plan* will produce significant environmental effects if one or more of the following occur:

- A substantial effect on a rare, threatened, or endangered plant or animal species, which is biologically most likely to result from habitat loss, so that an effect on habitat for such species is also significant;
- Any substantial interference with the movements of individuals of one or more resident or migratory fish or wildlife species;

- Any substantial diminution in the amount of habitat available for fish, wildlife, or plants in general (i.e., not considering just rare, threatened, or endangered species);

In addition to the Appendix G tests of significance, this EIR adopts the following additional tests of significance; the *General Plan* will have significant environmental effects if its implementation results in:

- Any substantial alteration of wetlands or agricultural lands contrary to the requirements of the California Coastal Act (i.e., alterations which cannot be found to be consistent with the requirements of the Coastal Act), or any alteration of wetlands or "special aquatic sites" contrary to the requirements of the federal Clean Water Act;
- A substantial alteration in the biological diversity of local ecosystems, caused either by the loss of native organisms or by the introduction of non-native organisms, resulting in substantial changes in the composition, structure, or function of the native ecosystems.

IMPLICATIONS OF THE LAND USE DIAGRAM

Development pursuant to the Land Use Diagram could result in direct effects on wetlands in the bottoms of the "gulches" because of the deposition of sediment eroded from uplands in wetland areas or the erosion of the slough channels themselves, as well as indirect effects because of water quality effects and changes in runoff volume and timing caused by the development.

Runoff from the Eureka terrace could lead to direct and/or indirect effects on the aquatic ecosystem in Humboldt Bay because of water quality changes and sedimentation.

Port development projects could lead to introductions of exotic aquatic species to Humboldt Bay because of ship de-ballasting inside the bay, and to the related loss of native aquatic species from the bay's ecosystem, potentially including economically important fish and shellfish species.

Development on the Samoa Peninsula that is consistent with the Land Use Diagram could create direct losses and habitat losses for sensitive plant and animal species and impacts to sensitive ecosystem types (dunelands and wetlands).

GENERAL PLAN POLICY RESPONSE

The policies cited in Section 6.1, Water Resources, would also apply to special-status species.

IMPACTS

The policies included in the *General Plan* protect most of the special-status species and ecosystem types in the Planning Area, and implementing the policies will avoid impacts to most of these resources.

The protection of the Humboldt Bay ecosystem, particularly with respect to degradation because of the introduction of exotic aquatic organisms in ballast waters, is not ensured by the policies of the *General Plan*. This issue is, however, largely a concern of the Humboldt Bay Harbor, Recreation, and Conservation District, the California Department of Fish and Game, the Coastal Commission, and other state and federal agencies. Accordingly, this potential impact is not considered an impact associated with implementation of the *General Plan*.

Overall, the policies and programs of the *Policy Document* serve to reduce the special-status species and ecosystems impacts of development under the *General Plan* to a less-than-significant level.

MITIGATION MEASURES

No additional mitigation measures are necessary to address impacts associated with special-status species and ecosystem types in the Planning Area. The City should, however, add the following mitigating policy to the *Policy Document* in order to address the potential effects on the Humboldt Bay ecosystem because of introduction of exotic organisms:

M6.1: The City shall coordinate local development approvals, which are made under the provisions of this General Plan, with any program created by responsible local, state, or federal agencies to address the effects of introduced (exotic) aquatic species on the Humboldt Bay ecosystem.

In addition to avoiding or reducing impacts to the natural ecosystem, implementing this measure also will help in avoiding adverse effects on commercially important fishing and shellfish-harvesting concerns located in the Planning Area.

6.5 AIR QUALITY

ENVIRONMENTAL SETTING

Air quality in the Planning Area is among the best in urbanized areas in the state. The Planning Area is, as of 1994, in "attainment" status for all federal criteria air pollutants. In addition, the Planning Area is in "attainment" for all but one of the State of California standards (which are often more stringent than are the federal standards); the Planning Area is classified as "nonattainment" for particulate matter smaller than 10 micrometers in size (PM10). PM10 in the Planning Area may arise from construction-raised dust, from vehicular emissions, and from roadway residues; however, the leading source is smoke, primarily from wood-fired space heating devices.

METHODOLOGY

Assumptions

- Development will occur consistent with the assumptions in Chapter 2; the impacts discussed in this section are based on the likely effects of construction of this projected development. The assessments are based on qualitative programmatic conclusions about impacts which typically arise from such actions.
- In addition to development inside the city, development will also occur in parts of the Planning Area outside of the city, and will be governed by the appropriate County planning policies. This development may contribute to potential cumulative effects in combination with existing development and development in the city.
- Existing laws which protect the natural environment, especially those enacted at the state and federal levels, will continue to provide the protections of the natural environment that exist at this time (see the *Background Report* for a summary of these laws). If these laws were substantially weakened, then the assessment of the *General Plan's* effects presented below would not reflect the plan's actual effects on the environment.

Thresholds of Significance

An impact would be considered significant if development under the *General Plan* would result in a violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation, or the exposure of sensitive receptors to substantial pollutant concentrations;

IMPLICATIONS OF THE LAND USE DIAGRAM

Continued development in the Planning Area could result in additional PM10 production, especially from wood-fired space heaters, which would be a cumulative effect; such a result would frustrate attainment of the State's PM10 standards.

GENERAL PLAN POLICY RESPONSE

The Policy Document includes the following policies to address air quality.

Air Quality - General

- 6.E.1. *The City shall cooperate with other agencies to develop a consistent and effective approach to air quality planning and management and to develop mitigation measures to minimize stationary and area source emissions.*
- 6.E.2. *The City shall support the North Coast Unified Air Quality Management District in its development of improved ambient air quality monitoring capabilities and the establishment of standards, thresholds, and rules to more adequately address the air quality impacts of new development.*
- 6.E.3. *The City shall require project-level environmental review to include identification of potential air quality impacts and designation of design and other appropriate mitigation measures or offset fees to reduce impacts. The City shall work with project proponents and other agencies in identifying, ensuring the implementation of, and monitoring the success of mitigation measures.*
- 6.E.4. *The City shall submit development proposals to the North Coast Unified Air Quality Management District for review and comment in compliance with CEQA prior to consideration by the Planning Commission and/or City Council.*
- 6.E.5. *In reviewing project applications with potential for creating air quality impacts, the City shall consider alternatives or amendments that reduce emissions of air pollutants.*

Air Quality--Transportation/Circulation

- 6.F.1. *The City shall attempt to ensure smooth-flowing traffic conditions for major roadways through planning of traffic signals and traffic signal coordination, parallel roadways, and intra- and inter-neighborhood connections where significant reductions in overall emissions can be achieved.*
- 6.F.2. *The City shall continue and, where appropriate, expand the use of synchronized traffic signals to smooth traffic flow and thereby reduce pollutant emissions.*
- 6.F.3. *The City shall encourage the use of alternative modes of transportation by incorporating public transit, bicycle, and pedestrian modes in City transportation planning and by encouraging new development to provide adequate pedestrian and bikeway facilities.*
- 6.F.4. *The City shall consider instituting disincentives for single-occupant vehicle trips, including limitations in parking supply in areas where alternative transportation modes are available and other measures identified by the North Coast Unified Air Quality Management District.*
- 6.F.5. *The City shall endeavor to secure adequate funding for transit services so that transit is a viable transportation alternative. New development shall pay its fair share of the cost of transit equipment and facilities required to serve new projects.*

IMPACTS

The policies in the *General Plan* successfully address sources of most potential air pollutants, and implementing the policies will protect most aspects of air quality in the local airshed. However, the PM10 nonattainment in the Planning Area results from cumulative effects, and the North Coast Unified Air Quality Management District (NCUAQMD) has not yet promulgated an approach which addresses PM10 from residences in the Planning Area. Accordingly, the effects of development associated with implementation of the *General Plan* are considered a significant environmental impact.

MITIGATION MEASURES

No additional mitigation measures are required for most aspects of air quality concerns covered by this General Plan. However, the PM10 nonattainment status of the local air basin may require future action by the NCUAQMD and other local jurisdictions. Accordingly, the following mitigation measure is recommended:

M6.2: The City shall coordinate with all future efforts or control programs promulgated by the North Coast Unified Air Quality Management District to address PM10 generation within the city. This may include requiring the implementation of measures designed to reduce PM10 generated during construction operations. It may include adopting appropriate state and/or federal standards for wood-fired space heaters in new development or in redevelopment projects. If appropriate, it may also involve cooperation in retrofit incentive programs for existing developed areas.

Even with implementation of this mitigation recommendation, the air quality impacts associated with exceedance of the State's PM10 emission standard are considered significant.

CHAPTER 7

HEALTH AND SAFETY

This chapter examines the *General Plan's* impacts on issues related to health and safety. The chapter covers seismic and geological conditions, wildland and urban fire potential, tsunami and other flooding, toxic materials, and noise. The environmental setting in this chapter is summarized from the detailed descriptions in Chapter 10 of the *General Plan Background Report*.

7.1 SEISMIC SAFETY AND GEOLOGICAL ISSUES

ENVIRONMENTAL SETTING

The Planning Area lies within the influence zones of at least five sources of significant seismic shaking, related to the presence in the Planning Area of three major crustal plates and to their interactions. In addition, the land surfaces within the Planning Area are subject to a number of different types of ground or slope failure, most of which are exacerbated by seismic shaking resulting from earthquakes.

The description in the *Background Report* of the seismic potential for the Cascadia Subduction Zone has been augmented since the publication of the *Background Report* by the publication of a "planning study" for a potential Cascadia Subduction Zone earthquake (T. Topozada and others, Planning Scenario in Humboldt and Del Norte Counties, California, for a Great Earthquake on the Cascadia Subduction Zone; California Department of Conservation, Division of Mines and Geology, Special Publication 115; 1995). The "scenario earthquake" is described as follows:

1. The Gorda segment of the Cascadia Subduction Zone (CSZ), extending 150 miles [240 kilometers (km)] from Cape Mendocino to Cape Blanco, ruptures in an earthquake of Magnitude 8.4.
2. The ocean floor undergoes a maximum surface displacement of 26 feet (8 m), with the east side up, on a fault dipping 11 degrees to the east beneath Humboldt and Del Norte counties.
3. Sea floor deformation generates a destructive sea wave or tsunami.
4. Triggered offset along the Little Salmon fault (south of Eureka) averages 6 feet (2 m).
5. Potentially damaging ground shaking continues for about 60 seconds within 25 miles (40 km) of the fault. Humboldt and Del Norte counties are less than 25 miles above the CSZ fault plane which dips gently eastward, and are wholly within the zone of damaging shaking.
6. Potentially damaging aftershocks occur for several months following the main shock, with a few earthquakes in the Magnitude 6 to Magnitude 7 range.

Based on the scenario earthquake, the Modified Mercalli Intensity (MMI) predicted for the Eureka terrace by Topozada and others (Map S-1) is approximately the upper end of the range of effects under "VIII" in Table 10-1 of the *Background Report*. However, the MMI is predicted to be "IX" for the Samoa Peninsula, for the low-lying area west of Highway 101 in Eureka, for King Salmon and the low-lying area west of Humboldt Hill, and for the unconsolidated low-lying areas in the Elk River Valley, the Eureka Slough plain, and the bottoms of Martin Slough and First, Second, and Third sloughs; in addition, all of these areas of unconsolidated sediments are anticipated to be subject to a significant potential for liquefaction, and the canyon margins bordering the sloughs are likely to be subject to lurching and slope failure. Humboldt Hill is identified as an area likely to be subject to coherent landsliding associated with the earthquake's shaking.

METHODOLOGY

Assumptions

Assumptions made in preparing this environmental assessment include:

- Development within the city will occur according to the development assumptions in Chapter 2 of this EIR.
- In addition to development inside the city, development will also occur in parts of the Planning Area outside of the city, and will be governed by the appropriate County planning policies. This development may contribute to potential cumulative effects in combination with existing development and development in the city.
- Within the time frame of this General Plan, seismic events and events of other kinds of natural hazards will occur; however, the specific kinds or magnitudes of these events cannot be predicted accurately.
- Specifically with respect to events on the Cascadia Subduction Zone, additional research will continue during the time frame of the *General Plan*; an event such as the "scenario earthquake" *may* occur during the time frame of the *General Plan*. However, at the present time the knowledge and technical approaches available to earth scientists and government advisory agencies is insufficient to characterize fully the anticipated events that may be expected to occur.

Thresholds of Significance

Appendix G to the *CEQA Guidelines* includes specific threshold tests of significance relevant to the contents of this section of the EIR; development under the *General Plan* would create significant impacts if it resulted in crossing any of these thresholds:

- Causing substantial flooding, erosion, or siltation;
- Exposing people or structures to major geological hazards;

IMPLICATIONS OF THE LAND USE DIAGRAM

The primary concern for the consequences of the *General Plan* with respect to seismic and geological issues is the potential for effects to occur that are associated with seismic activity on the Cascadia Subduction Zone (CSZ). The Land Use Diagram includes designations which will allow development and/or redevelopment to occur on unconsolidated, liquefiable soils west of Highway 101 / Broadway in the city and the Fields Landing and King Salmon areas, as well as on the Samoa Peninsula. The Diagram also provides developmental designations in areas that may be subject to accelerated slope failure during seismic shaking associated with CSZ events, particularly on Humboldt Hill and along the margins of the "gulches" in the city (Martin Slough and First, Second, and Third sloughs). The entire Planning Area is likely to be subject to seismic shaking more intense than those addressed in existing building codes. There is a potential for the effects of CSZ events to disrupt emergency response capability within the Planning Area, possibly including disruption of the "critical facilities" identified in the *Background Report*.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies related to seismic and geologic hazards.

Seismic Hazards

7.A.1. For all development in areas subject to seismic hazards (i.e., fault rupture, amplified seismic shaking, slope failure, subsidence, settlement, or other similar effects) which is otherwise consistent with the policies of this General Plan, the City shall, prior to project approval, require a geological report prepared by a registered geologist, a certified engineering geologist, or a registered engineer with expertise in seismic engineering. The report shall consider, describe, and analyze the following:

- a. Geologic conditions, including soil, sediment, and rock types and characteristics, in addition to structural features such as bedding, joints, and faults;
- b. Evidence of past or potential liquefaction conditions, or other types of ground failure, related to seismic shaking;
- c. Potential effects on the site because of fault rupture; and
- d. Any other information that might affect the proposed development, such as the information called for in Division of Mines and Geology Notes 44 and 49.

The report shall recommend mitigation measures for any potential impacts and shall outline alternative solutions. The report shall express a professional opinion as to whether the project can be designed so that it will neither be subject to nor contribute to significant geological instability throughout the life span of the project.

7.A.2. The City shall work with Humboldt County to develop an emergency preparedness program so Eureka Area residents and visitors are not endangered by tsunami runup and inundation.

7.A.3. The City shall require that new structures intended for human occupancy be designed and constructed to minimize risk to the safety of occupants.

7.A.4. The City shall develop mechanisms to encourage and assist in the seismic retrofitting of buildings susceptible to damage during seismic events and to conduct the necessary work in a manner that is financially feasible to property owners and that can be conducted with minimum disruption to tenants. In particular, the City should consider the retrofit needs of the following types of structures:

- a. Unreinforced masonry buildings (URMs)
- b. Pre-1940 wood frame houses
- c. Tilt-up buildings
- d. Pre-mid 1970s concrete frame buildings
- e. Mobilehomes

7.A.5. The City should seek to give special structural consideration and flexibility to officially identified historically- and architecturally-significant structures.

7.A.6. The City shall require that all new parapets, signs, and other building ornamentation are constructed to withstand seismic shaking.

7.A.7. The City shall ensure that all unreinforced masonry buildings that are used for public purposes are modified to be earthquake safe, or if such a modification is not feasible, public use of the buildings be terminated.

7.A.8. The City shall work with Humboldt County and appropriate state and federal agencies to identify major emergency transportation corridors for use during seismic emergencies. In doing so, the City should ensure safe access routes to communication centers, hospitals, airports, staging areas, and fuel storage sites.

- 7.A.9. The City shall identify provisions for water supply and delivery and wastewater treatment and disposal in cases where services are interrupted as a result of damage caused by seismic activity.
- 7.A.10. The City shall identify alternative sources of energy (i.e., electricity, natural gas) for use in cases where energy supplies are interrupted as a result of damage caused by seismic activity.

Geological Hazards

- 7.B.1. The City shall ensure that new development is sited and designed consistent with limitations imposed by geologic hazards.
- 7.B.2. The City shall ensure that development on or near the shoreline of Elk River, Humboldt Bay, and Eureka Slough neither contributes significantly to, nor is subject to, high risk of damage from shoreline erosion over the life span of the development.
- 7.B.3. Within the Coastal Zone, the City shall prohibit alteration of cliffs, bluff tops, and gulch faces or bases by excavation or other means except to protect existing structures. Permitted development shall not require the construction of protective devices that would substantially alter natural landforms.
- 7.B.4. For all high density residential and other high occupancy development located in areas of significant liquefaction potential, the City shall, at the time project application, require a geology and soils report prepared by a registered geologist, professional civil engineer with expertise in soil mechanics or foundation engineering, or by a certified engineering geologist, and shall consider, describe, and analyze the following:
- Geologic conditions, including soil, sediment, and rock types and characteristics in addition to structural features, such as bedding, joint and faults;
 - Evidence of past or potential liquefaction conditions, and the implications of such conditions for the proposed development;
 - Potential effects of seismic forces resulting from a maximum credible earthquake;
 - Any other factors that might affect the development.

The report shall also detail mitigation measures for any potential impacts and outline alternative solutions. The report shall express a professional opinion as to whether the project can be designed so that it will neither be subject to nor contribute to significant geologic instability throughout the life-span of the project.

- 7.B.5. For all development proposed within areas subject to significant shoreline erosion, and which is otherwise consistent with the policies of this General Plan, the City shall, prior to project approval, require a geology and soils report prepared by a registered geologist, professional civil engineer with expertise in soil mechanics or foundation engineering, or by a certified engineering geologist, and shall consider, describe, and analyze the following:
- Site topography, extending the surveying work beyond the site as needed to depict unusual conditions that might affect the site;
 - Historic, current and foreseeable shoreline erosion, including investigation of recorded land surveys and tax assessment records in addition to the use of historic maps and photographs where available and feasible changes in shore configuration and sand transport;
 - Geologic conditions, including soil, sediment and rock types and characteristics in addition to structural features, such as bedding, joint and faults;
 - Impact of construction activity on the stability of the site adjacent area;
 - Potential erodibility of site and mitigating measures to be used to ensure minimized erosion problems during and after construction;
 - Effects of marine erosion on shoreline areas;

- g. *Potential effects of seismic forces resulting from a maximum credible earthquake;*
- h. *Any other factors that might affect slope stability.*

The report shall evaluate the off-site impacts of development and the additional impacts that might occur due to the proposed development. The report shall also detail mitigation measures for any potential impacts and outline alternative solutions. The report shall express a professional opinion as to whether the project can be designed so that it will neither be subject to nor contribute to significant onsite or offsite geologic instability throughout the life-span of the project.

Emergency Response

- 7.F.1. *The City shall systematically and regularly review all accident contingency plans which relate to Eureka.*
- 7.F.2. *The City shall work with Caltrans and Humboldt County to identify a less congested route through Eureka to be used for the transportation of heavy, as well as hazardous materials.*
- 7.F.3. *The City shall attempt to ensure that major access corridors are available and unobstructed in case of major emergency or disaster.*
- 7.F.4. *The City shall cooperate with Humboldt County, the State Office of Emergency Services, and the Federal Emergency Management Agency in developing and operating a coordinated emergency response program that best utilizes the resources of each agency in assisting citizens and visitors in coping with and responding to a major emergency or disaster.*

IMPACTS

Implementing the policies included in the *General Plan* adequately addresses the potential impacts from most sources of seismic and geological concerns in the Planning Area. The policies do not, however, address the potential seismic effects from Cascadia Subduction Zone (CSZ) activity to an extent which would allow a conclusion that these concerns are reduced to a level of insignificance, in part because these effects still have not been characterized adequately. This is a potentially significant impact. It should be noted that it may not be possible to avoid completely or reduce these effects to a level of insignificance.

MITIGATION MEASURES

Additional mitigation measures are not necessary for seismic and geological concerns arising from most sources affecting the city. However, potential CSZ effects, while not fully characterized at the present time, are of such a magnitude that an additional mitigation measure is required:

- M.6.3: *The City shall cooperate with the county and State Office of Emergency Services, Humboldt State University, the California Division of Mines and Geology, and the U.S. Geological Survey to develop a more adequate understanding of CSZ seismic risks and the potential effects of CSZ events on the city and its inhabitants. The City shall update its local preparedness programs, its building permit processes, and its General Plan policies as additional information becomes available about the risks from CSZ events, in order to better protect the city's inhabitants and visitors.*

This measure is similar to, but more expansive than, Policy 7.F.4 from the *Policy Document*. Even with this additional mitigation measure, it may not be possible to reduce the risks from a CSZ seismic event below the level of environmental significance.

7.2 TSUNAMI AND FLOODING

ENVIRONMENTAL SETTING

The potential for flooding in the Planning Area differs according to the source of the water in the flooding. Rainwater-derived flooding in the Planning Area is largely a risk for the low-lying areas south and northeast of the Eureka terrace, and for the low areas close to Humboldt Bay. There is also a minor risk of tsunami ("tidal wave") induced flooding from tsunami derived from distant earthquakes. There is a risk of flooding in the Planning Area of unknown but potentially major importance as a result of an anticipated rise in global sea level of between one and more than three feet during the next 50 years. A sea level elevation increase would lead to an increase in flooding risk from virtually all of the other sources of flooding, but there is not, as yet, consensus on the degree of rise to be expected.

The report by Topozada and others (1995), published since the *Background Report* was completed, identifies an anticipated tsunami from a Cascadia Subduction Zone "scenario earthquake" occurring in the Planning Area which exceeds the predicted tsunami events described in the *Background Report*. The anticipated arrival time for the initial locally generated tsunami may be 10 minutes or less following the onset of significant shaking. The average offshore height of the locally generated tsunami is expected to be about 9 m (30 feet); shoreline runup elevations would be higher. As a result, the tsunami is expected to have a potential for crossing low areas on the Samoa Peninsula and the South Spit (i.e., lower than about 40 feet in elevation), causing shoreline flooding on the east side of Humboldt Bay. The entire Eureka waterfront, from Elk River to Eureka Slough, is identified as subject to tsunami inundation, possibly within minutes after being subjected to very intense seismic shaking. The authors of the report did not specifically consider tsunami runup in the Elk River and Eureka Slough/Freshwater Creek valleys; such tsunami progression up these valleys is likely.

Based on tsunami from other subduction zone earthquakes, the report's authors expect that the tsunami will occur in several (up to four or five) waves, with arrival times spread out over a period of up to 10 hours following the subduction zone earthquake. The earliest-arriving wave may not be the largest wave in the series.

METHODOLOGY

Assumptions

Assumptions made in preparing this environmental assessment include:

- Development within the city will occur according to the development estimates in Chapter 2 of this *EIR*
- In addition to development inside the city, development will also occur in parts of the Planning Area outside of the city, and will be governed by the appropriate County planning policies. This development may contribute to potential cumulative effects in combination with existing development and development in the city.
- Within the time frame of the *General Plan*, seismic events and events of other kinds of natural hazards will occur; however, the specific kinds or magnitudes of these events cannot be predicted accurately.
- Specifically with respect to events on the Cascadia Subduction Zone, additional research will continue during the time frame of the *General Plan*; an event such as the "scenario earthquake" may occur during the time frame of this *General Plan*. However, at the present time the knowledge and technical approaches available to earth scientists and government advisory agencies is insufficient to characterize fully the anticipated events that may be expected to occur.

Thresholds of Significance

Appendix G to the *CEQA Guidelines* includes specific threshold tests of significance relevant to the contents of this section of the *EIR*; development under the *General Plan* would create significant impacts if it caused substantial flooding, erosion, or siltation;

This *EIR* also adopts the additional test of significance that development under this *General Plan* would have an environmentally significant effect if it resulted in exposing people to substantial flooding hazard (as opposed to *causing* the flooding, as above), including exposing people to flooding caused by tsunami.

IMPLICATIONS OF THE LAND USE DIAGRAM

The primary concerns for the effects of development of the *Land Use Diagram* stem from potential tsunami effects resulting from a CSZ event, arriving in the Planning Area within minutes of a major earthquake. The Diagram incorporates designations that could allow development or redevelopment in several areas that may be subject to tsunami inundation, including the areas west of Broadway / Highway 101 in the Eureka, King Salmon, and Fields Landing areas, on the Samoa peninsula, along the northern city waterfront, and on the islands north of the Eureka shoreline. Such development would expose residents and visitors to potentially significant risks from tsunami. The effects of such a tsunami would exacerbate the effects of the seismic event on emergency response capabilities, and the tsunami itself could severely affect some of the designated "critical facilities." Increases in global sea level associated with global warming could aggravate the general effects of inundation, both related to normal flooding and tsunamis.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies related to flooding.

Flooding

- 7.D.1. *The City shall prohibit high density residential and other high occupancy development, including new hospitals, schools, residential development with a gross density of 8 units per acre or more, office buildings 10,000 square feet in size or larger, or visitor-serving structural developments 5,000 square feet in size or larger, from locating in flood hazard areas, as designated on the Federal Emergency Management Agency Flood Insurance Rate Maps (FIRM), dated June 1, 1982, unless they are constructed with a finished foundation that extends above the 100-year flood level and meet all applicable drainage policies of this General Plan. Other development in flood hazard areas shall incorporate mitigation measures that minimize the potential for flood damage, including development siting and use of flood proofing techniques and materials, consistent with other land use plan policies.*

Emergency Response

- 7.F.3. *The City shall attempt to ensure that major access corridors should be available and unobstructed in case of major emergency or disaster.*
- 7.F.4. *The City shall cooperate with Humboldt County, the State Office of Emergency Services, and the Federal Emergency Management Agency in developing and operating a coordinated emergency response program that best utilizes the resources of each agency in assisting citizens and visitors in coping with and responding to a major emergency or disaster.*

IMPACTS

Implementing the policies in the *General Plan* would address the potential concerns for flooding from "normal" sources in the Planning Area. The policy does not address the potential effects of tsunami from CSZ earthquake sources in the Planning Area, in part because these risks have still not been characterized adequately. This is considered a potentially significant impact. As above, it may not be possible to avoid completely or reduce to a level of insignificance the tsunami risk from this source.

MITIGATION MEASURES

As with the seismic effects of a CSZ event, the potential tsunami risks associated with such an event are of such a magnitude that an additional mitigation measure is warranted:

M.6.4: The City shall cooperate with Humboldt County and the State Office of Emergency Services, Humboldt State University, the California Division of Mines and Geology, and the U.S. Geological Survey to develop a more adequate understanding of CSZ-derived tsunami risks and the potential effects of CSZ-derived tsunami on the city and its inhabitants. The City shall update its local preparedness programs and its General Plan policies as additional information becomes available about the risks from CSZ-derived tsunami, in order to better protect the city's inhabitants and visitors.

Even with this additional mitigation measure, it may not be possible to reduce the risks from a CSZ-derived tsunami below the level of environmental significance.

7.3 WILDLAND AND URBAN FIRE

ENVIRONMENTAL SETTING

This section is concerned mostly with wildland fire, and secondarily with the context of structural fires as a natural hazard; the context of fire suppression and protection services is largely contained in Chapter 5 of this *EIR*. The wildland areas within the Planning Area are subject to wildland (i.e., "forest") fires. Such fires in the "resource production" areas in the remotest parts of the Planning Area, which are primarily the responsibility of the California Department of Forestry and Fire Protection (CDF), potentially could affect the overall operations of the timber industry in the Planning Area.

The rural development pattern which has emerged in rural (but not remote) parts of the Planning Area is conducive to rapid spread of wildland fires to residential structures. This pattern also allows a rapid spread of structural fires to wildlands. In the area immediately surrounding the city limits, fire suppression responsibilities in these "mixed" areas are largely borne by Humboldt Fire District No. 1.

See Chapter 5 of this *EIR* for a consideration of "urban" or structural fire concerns within city limits, which are the responsibility of the City's Fire Department.

METHODOLOGY

Assumptions

Assumptions made in preparing this environmental assessment include:

- Development within the city will occur according to the development estimates included in Chapter 2 of this *EIR*

- In addition to development inside the city, development will also occur in parts of the Planning Area outside of the city, and will be governed by the appropriate County planning policies. This development may contribute to potential cumulative effects in combination with existing development and development in the city.

Thresholds of Significance

For the purpose of this EIR, an impact is considered significant if adoption or implementation of the *General Plan* would expose people or property to substantial wildland fire hazard.

IMPLICATIONS OF THE LAND USE DIAGRAM

The Land Use Diagram includes residential development designations in areas outside of city limits which would lead to increased development in the "urban / wildland fringe." Such development is typically associated with an increased potential for wildland fire to destroy residences. In addition, this development pattern also increases the likelihood that a residential fire will escape to become a wildland fire. This pattern results in an increased difficulty in responding to and/or controlling wildland fires.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies related to fire safety.

Fire Protection

- 4.G.7. *The City shall cooperate with Humboldt Fire District No.1 and the California Department of Forestry and Fire Protection (CDF) in providing adequate levels of fire protection services in the Planning Area.*

Fire Safety

- 7.C.1. *The City shall strengthen the ongoing fire safety review process in an effort to increase the safety of all structures from fires.*
- 7.C.2 *The City shall locate and maintain fire stations according to fire service area standards and maintain the water supply system to provide the required water flow for fire fighting purposes.*

IMPACTS

The policies included in the *General Plan* adequately address the City responsibilities for wildland and urban fire protection inside city limits. Accordingly, the wildland and urban fire impacts associated with implementation of the *General Plan* are considered less-than-significant.

The policies and programs of the *General Plan* do not address the risk of wildland fire outside city limits; the responsibility for wildland fires outside the city limits is, however, delegated by state law to the California Department of Forestry and Fire Protection (CDF), and the *General Plan* may not specify programs for adoption by this state agency.

MITIGATION MEASURES

No additional mitigation measures beyond the policies and programs of the *General Plan* are necessary.

7.4 TOXIC MATERIALS

ENVIRONMENTAL SETTING

The Planning Area contains many areas of known or suspected contamination of soil or groundwater by toxic materials. Most of this contamination is the result of contamination by petroleum products, but some areas are contaminated by heavy metals or other kinds of chemical compounds. Suspected contamination is heaviest along the Eureka waterfront, and the area west of Broadway is another area of concern.

METHODOLOGY

Assumptions

Assumptions made in preparing this environmental assessment include:

- Development within the city will occur according to the development estimates included in Chapter 2 of this *EIR*.
- In addition to development inside the city, development will also occur in parts of the Planning Area outside of the city, and will be governed by the appropriate County planning policies. This development may contribute to potential cumulative effects in combination with existing development and development in the city.
- In general, this *EIR* assumes a continuation of the regulatory policies affecting "toxic" materials in effect in early 1996. Current discussions within the state and federal regulatory agencies about abating or disposing of some forms of currently regulated "toxic" or "hazardous" materials will continue, however, and the regulatory programs for some "toxic" or "hazardous" materials may change substantially and in unpredictable ways during the time frame of this General Plan.

Thresholds of Significance

According to Appendix G to the *CEQA Guidelines*, new development under the *General Plan* would create significant impacts if it created a potential public health hazard, or involved the use, production, or disposal of materials which pose a hazard to people or to animal or plant populations.

IMPLICATIONS OF THE LAND USE DIAGRAM

The primary risk resulting from the development consistent with the *Land Use Diagram* is the potential for people to be exposed to toxic materials associated with redevelopment of sites contaminated with such materials by previous uses.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies concerning toxic materials.

Hazardous Materials and Toxic Contamination

- 7.E.1. The City shall ensure that the use and disposal of hazardous materials in the Eureka area complies with local, state, and federal safety standards.

- 7.E.2. *The City shall discourage the development of residences or schools near known hazardous waste disposal or facilities. Conversely, the City shall discourage the development of hazardous waste disposal or handling facilities near residences or schools.*
- 7.E.3. *The City shall require secondary containment and periodic examination for all storage of toxic materials.*
- 7.E.4. *The City shall ensure that industrial facilities are constructed and operated in accordance with current safety and environmental protection standards.*
- 7.E.5. *The City shall require that new industries that store and process hazardous materials provide a buffer zone between the installation and the property boundaries sufficient to protect public safety. The adequacy of the buffer zone shall be determined by the City.*
- 7.E.6. *The City shall require that applications for discretionary development projects that will generate hazardous wastes or utilize hazardous materials include detailed information on hazardous waste reduction, recycling, and storage.*
- 7.E.7. *The City shall require that any business that handles a hazardous material prepare a plan for emergency response to a release or threatened release of a hazardous material.*
- 7.E.8. *The City shall encourage the State Department of Health Services and the California Highway Patrol to review permits for radioactive materials on a regular basis and to promulgate and enforce public safety standards for the use of these materials, including the placarding of transport vehicles.*
- 7.E.9. *The City shall identify sites that are inappropriate for hazardous material storage, maintenance, use, and disposal facilities due to potential impacts on adjacent land uses and the surrounding natural environment.*
- 7.E.10. *The City shall work with local fire protection and other agencies to ensure an adequate countywide response capability to hazardous materials emergencies.*
- 7.E.11. *The City shall work with owners of property affected by toxic contamination to identify cost-effective approaches to remediation of contaminated soils. In particular, the City shall focus its efforts on developing unified strategies to addressing cleanup of large areas (e.g., the Westside Industrial Area, the waterfront area) so as to reduce the unit cost of remediation.*
- 7.E.12. *The City shall work with the Regional Water Quality Control Board and Humboldt County to identify and mitigate groundwater contamination caused by past disposal of toxic materials along the waterfront and in industrial areas.*

IMPACTS

The policies included in the *General Plan* comply with the appropriate state and federal regulatory programs for this topic, and adequately address the City's responsibilities in regulating land use within the city. The impacts are, therefore, considered less-than-significant.

MITIGATION MEASURES

No additional mitigation measures are necessary beyond the policies in the *General Plan*.

7.5 NOISE

ENVIRONMENTAL SETTING

A detailed description of the existing noise environment is contained in the *Background Report*. The existing noise environment throughout the majority of the Eureka area is dominated by traffic on major highways, which include State Route (S.R.) 101 and S.R. 255. Major arterial streets were also identified as a major noise source in Eureka.

Industrial and other fixed noise sources are dispersed throughout the city. The major fixed noise sources identified in the *Background Report* include the Louisiana Pacific lumber mill, Schmidbauer Lumber, Pacific Choice Seafood, and Redwood Acres Fairground, tire and muffler shops, metal fabricating shops, large HVAC systems, commercial developments, loading docks, etc.

Noise related to aircraft operations were identified for Murray Field Airport. Aircraft noise levels were due primarily to arrivals and departures along runways 11/29 and 07/25.

A community noise survey was conducted throughout Eureka away from major noise sources, in areas containing noise-sensitive land uses. Noise levels ranged between 46 dB and 59 dB L_{dn} .

METHODOLOGY

This section describes the assumptions and thresholds of significance developed to determine noise impacts.

Assumptions

- Development throughout the Eureka will occur based upon the *Land Use Diagram*. As development occurs, increased traffic will result in increased traffic noise. In addition, industrial facilities and other stationary noise sources will be developed.
- Traffic volume data, as reported in Chapter 4 of this *EIR*, was provided by the City's Transportation Consultants. The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) was used to predict distances to L_{dn} contours for all highways and major roadways.
- It is difficult to determine the noise impacts associated with future industrial facilities. However, based upon the proposed future land use, areas of potential noise impacts associated with new industrial facilities can be described.
- North Coast Rail Authority officials were not able to provide estimates of future railroad activity. Therefore future railroad noise levels were assumed to be the same. Railroad noise level measurements and accepted modeling techniques were used to determine the distances to L_{dn} contours.
- Future aircraft noise levels were based upon the *Murray Field Airport Master Plan, 1993*.

Thresholds of Significance

- Impacts are considered significant if noise levels exceed the standards contained in the *Policy Document*.
- Another method of determining the significance of noise impacts is by the expected change in ambient noise levels which will occur as a result of the project. Expected reactions to changes in ambient noise levels have been reported by Egan and others for persons who are exposed to noise sources that are quantified by metrics that define short-term exposure (e.g., hourly L_{eq} , L_{max} and L_n). These metrics are

usually used to describe noise impacts due to industrial operations, machinery and other sources that are not associated with transportation. According to Egan and others, an increase of at least 3 dB is usually required before most people will perceive a change in noise levels, and an increase of 5 dB is required before the change will be clearly noticeable. The common practice has been to assume that a minimally perceptible increase of 3 dB represents a significant increase in ambient noise levels.

- Table 7-1 is based upon recommendations recently (August 1992) made by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. Their recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been assumed for this analysis that they are applicable to all sources of noise that are described in terms of cumulative noise exposure metrics such as the L_{dn} or CNEL. These metrics are generally applied to transportation noise sources, and define noise exposure in terms of average noise exposure during a 24-hour period with penalties added to noise that occurs during the nighttime or evening. L_{dn} or CNEL are often defined in terms of an average annual day, and are therefore quite different than the short-term noise level descriptors described above.

TABLE 7-1	
SIGNIFICANCE OF CHANGES IN CUMULATIVE NOISE EXPOSURE	
Ambient Noise Level Without Project (L_{dn} or CNEL)	Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more
Source: Federal Interagency Committee on Noise (FICON), as applied by Brown-Buntin Associates, Inc.	

IMPLICATIONS OF THE LAND USE DIAGRAM

Traffic Noise Levels

Implementation of the *General Plan* would result in an increase in traffic noise levels. Table 7-2 shows the distances to the traffic noise contours for all highways and major roadways within Eureka for the year 2010. This table also shows the relative change in noise levels from those reported in the *Background Report*. The potential exists for traffic noise levels at existing and future land uses to exceed acceptable noise exposure. Future noise-sensitive uses could be located inside the 60 dB L_{dn} roadway noise contours. Increased noise levels associated with traffic may encroach upon existing noise-sensitive land uses, or further increase noise levels already in excess of 60 dB L_{dn} .

TABLE 7-2

NOISE CONTOUR DATA
Distance (Feet) from Center of Roadway to L_{dn} Contours

Segment		Description	Existing		Year 2010		Difference
Existing	Year 2010		60 dB	65 dB	60 dB	65 dB	dB, at 100 feet
State Route 101							
1	1	South Boundary to Humboldt Hill Road	--	--	429	199	--
	2	Humboldt Hill Road to Herrick Road	--	--	440	204	--
	3	Herrick Rd. - Harris St.	295	137	225	105	-1.8
	4	(On Broadway) Harris St. - Wabash Ave.	270	125	205	95	-1.8
	5	(On Broadway) Wabash St. - 5th St.	264	122	195	90	-2.0
	6	(On 5th St.) Broadway - S.R. 255	179	83	162	75	-0.6
	7	(On 5th St.) S.R. 255 - End of 5th St.	164	76	133	62	-1.3
	8	End of 5th St. - Murray Field	305	141	379	176	+1.4
7	9	(On 4th St.) Broadway - S.R. 255	179	83	160	74	-0.7
8	10	(On 4th St.) S.R. 255 - End of 4th St.	160	74	232	108	+2.4
State Route 255							
9	11	Myrtle Ave. - Samoa Peninsula	117	54	131	61	+0.8
6th Street							
10	12	Entire Length	58	27	69	32	-1.1
7th Street							
11	13	Entire Length	65	30	33	15	-4.5
14th Street							
12	14	Entire Length	45	21	39	18	-0.8
Wabash Ave.							
13	15	Entire Length	73	34	45	21	-3.1
Buhne Street							
14	16	J St. - Harrison Ave.	65	30	55	26	-1.1
Henderson Street							
15	17	Entire Length	97	45	55	26	-3.7
Harris Street							
16	18	S.R. 101 - Harrison Ave.	76	35	66	30	-0.9
17	19	Harrison Ave. - Hubbard Ln.	90	42	92	43	+0.2
Harrison Ave.							
18	20	Myrtle Ave. - Harris St.	90	42	107	50	+1.2
Fairway Road							
19	21	Entire Length	76	35	68	32	-0.7
Herrick Road							
20	22	Entire Length	83	39	82	38	-0.1
Myrtle Ave.							
21	23	S.R. 101 - Harrison Ave.	138	64	145	67	+0.3
22	24	Harrison Ave. - East of Eureka	109	31	92	43	-1.1
"E" Street							
23	25	7th St. - Humboldt St.	61	28	--	--	--
24	26	Humboldt St. - Oak Avenue	76	35	--	--	--
"F" Street							
25	27	Henderson St. - Campton Rd.	73	34	--	--	--
"H" Street							
26	28	Entire Length	103	48	77	36	-1.9

Segment		Description	Existing		Year 2010		Difference dB, at 100 feet
Existing	Year 2010		60 dB	65 dB	60 dB	65 dB	
"I" Street							
27	29	7th St. - Del Norte St.	48	22	61	28	+1.6
28	30	Del Norte St. - Harris St.	69	32	59	28	-1.0
Elk River Road							
	31	Herrick to Westgate Drive	--	--	68	32	--
Ridgewood Drive							
	32	Westgate Drive to Walnut Drive	--	--	51	24	--
Walnut Drive							
	33	Ridgewood Drive to Avalon	--	--	52	24	--
	34	Avalon to Holly Street	--	--	78	36	--
	35	Holly Street to Hemlock Street	--	--	107	50	--
Dolbeer Street							
	36	Hemlock Street to Harris Street	--	--	91	42	--
Waterfront Street							
	37	Herrick Road to McCullens Avenue	--	--	92	43	--
	38	McCullens Avenue to Wabash Avenue	--	--	85	40	--
	39	Wabash Avenue to 1st Street	--	--	80	37	--

Implementation of the *General Plan* is generally expected to result in an increase in noise levels due to traffic. However, in some cases, traffic volumes have decreased along roadways due to the construction of roadways such as Waterfront Drive. As a rule, it takes a doubling of traffic to increase noise levels by approximately 3 dB or one-half the traffic to decrease noise levels by 3 dB.

Railroad Noise Levels

Implementation of the general plan land use diagram could result in noise-sensitive land uses encroaching within close proximity of the railroad tracks. This could result in individuals being exposed to noise levels which may be considered unacceptable. The approximate distance to the 60 dB L_{dn} noise contour for the track is 300 feet from the track. This distance does not account for shielding from buildings or topography, and are considered worst case scenarios. Noise-sensitive land uses located inside the 60 dB L_{dn} contours of the tracks would be considered exposed to unacceptable noise levels.

Industrial and Other Fixed Noise Sources

As additional development occurs throughout the city, the potential exists for noise-sensitive land uses to encroach upon existing or proposed fixed noise sources. The potential also exists for new fixed noise sources to encroach upon existing or proposed noise-sensitive land uses. Implementation of the general plan land use diagram results in additional commercial, industrial or office space.

All land designated for heavy commercial or industrial uses would be considered to potentially have noise sources which may exceed acceptable standards. It is not possible at this time to determine noise impacts associated with these designations. Therefore, a review of potential noise impacts should be conducted for these types of facilities when they are proposed.

Implementation of the *General Plan* is expected to result in the potential for additional land use noise compatibility conflicts between stationary noise sources and noise-sensitive land uses.

Aircraft Noise

Development according to the *Land Use Diagram* may result in noise-sensitive land uses located within the future 60 dB CNEL contour for Murray Field Airport.

Existing (Year 1991) and future (Year 2011) 60 and 65 dB CNEL contours are shown on Figure 7-1. The majority of operations occur to the northwest over Arcata Bay, and to the southeast toward Myrtle Avenue.

GENERAL PLAN POLICY RESPONSE

The Policy Document includes the following policies to regulate noise.

Residential Noise Exposure

- 7.G.1. The City shall prohibit new development of noise-sensitive uses where the noise level due to non-transportation noise sources will exceed the noise level standards of Table 7-1 (of the Policy Document) as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table 7-1.
- 7.G.2. The City shall require that noise created by new proposed non-transportation sources be mitigated so as not to exceed the noise level standards of Table 7-1 (of the Policy Document) as measured immediately within the property line of lands designated for noise-sensitive uses, as listed in Table 7-1.

TABLE 7-1(of the Policy Document)		
NOISE LEVEL PERFORMANCE STANDARDS		
New Projects Affected by or Including Non-transportation Sources		
Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq} dB	50	45
Maximum level, dB	70	65
Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).		

- 7.G.3. The City shall not subject existing dwellings and new single-family dwellings to the standards presented in Table 7-1 (of the Policy Document). As a consequence, such dwellings may be constructed in areas where noise levels exceed these standards and it shall not be the responsibility of the City to ensure that such dwellings meet these standards or the noise standards imposed by lending agencies such as HUD, FHA and Cal Vet. If homes are located and constructed in accordance with the policies of this section, it is expected that the resulting exterior and interior noise levels will conform to the HUD/FHA/Cal Vet noise standards.

For the purposes of compliance with the provisions of this section, the City defines transportation noise sources as traffic on public roadways, railroad line operations, and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Other noise sources are presumed to be subject to local regulations, such as a noise control ordinance. Non-transportation noise sources may include industrial operations, outdoor recreation facilities, HVAC units, and loading docks.

- 7.G.4. Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 7-1 (of the Policy Document) at existing or planned noise-sensitive uses, the City shall require an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design. The acoustical analysis shall meet the following requirements:

- a. It shall be the financial responsibility of the applicant.

- b. It shall be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics.
- c. It shall include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources.
- d. It shall include estimates of existing and projected cumulative (20 years) noise levels in terms of L_{dn} or CNEL and/or the standards of Table 7-1 (of the Policy Document), and compare those levels to the policies of this General Plan
- e. It shall recommend appropriate mitigation to achieve compliance with the policies and standards of this General Plan, giving preference to proper site planning and design over mitigation measures which require the construction of noise barriers or structural modifications to buildings which contain noise-sensitive land uses. Where the noise source in question consists of intermittent single events, the report must address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance.
- f. It shall include estimates of noise exposure after the prescribed mitigation measures have been implemented.
- g. It shall describe a post-project assessment program which could be used to evaluate the effectiveness of the proposed mitigation measures.

7.G.5. The City shall evaluate the general feasibility of proposed projects with respect to existing and future transportation noise levels shown in Figure 7-1 (of the Policy Document).

7.G.6. The City shall prohibit new development of noise-sensitive land uses in areas exposed to existing or projected levels of noise from transportation noise sources which exceed the levels specified in Table 7-2 (of the Policy Document), unless the project design includes effective mitigation measures to reduce exterior noise and noise levels in interior spaces to the levels specified in Table 7-2 (of the Policy Document).

7.G.7. The City shall ensure that noise created by new transportation noise sources is mitigated so as not to exceed the levels specified in Table 7-2 (of the Policy Document) at outdoor activity areas or interior spaces of existing noise-sensitive land uses.

7.G.8. New roadway improvement projects may be needed to accommodate development permitted according to the Land Use Diagram. As a result, existing noise-sensitive uses may be exposed to increased noise levels due to increased roadway capacity and increases in travel speeds, making it impractical to achieve the noise level standards contained Table 7-2 (of the Policy Document). As an alternative to the standards in Table 7-2 (of the Policy Document), the City will apply the following criteria to determine the significance of increases in noise related to improvement projects:

- a. Where existing traffic noise levels are less than 60 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a +5 dB L_{dn} increase in noise levels due to a roadway improvement project will be considered significant; and
- b. Where existing traffic noise levels range between 60 and 65 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a +3 dB L_{dn} increase in noise levels due to a roadway improvement project will be considered significant; and
- c. Where existing traffic noise levels are greater than 65 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a + 1.5 dB L_{dn} increase in noise levels due to a roadway improvement project will be considered significant.

TABLE 7-2 (of the Policy Document)

MAXIMUM ALLOWABLE NOISE EXPOSURE
Transportation Noise Sources

Land Use	Outdoor Activity Areas ¹ $L_{dn}/CNEL$, dB	Interior Spaces	
		$L_{dn}/CNEL$, dB	L_{eq} dB ²
Residential	60 ³	45	--
Transient Lodging	60 ³	45	--
Hospitals, Nursing Homes	60 ³	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls	60 ³	--	40
Office Buildings	--	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

¹ Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. For residential uses with front yards facing the identified noise source, an exterior noise level criterion of 65 dB L_{dn} shall be applied at the building facade, in addition to a 60 dB L_{dn} criterion at the outdoor activity area.

² As determined for a typical worst-case hour during periods of use.

³ Where it is not feasible to reduce noise in outdoor activity areas to 60 dB $L_{dn}/CNEL$ or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB $L_{dn}/CNEL$ may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Noise Compatibility

- 7.H.1. Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 7-2 (of the Policy Document) or the performance standards of Table 7-1 (of the Policy Document), an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.
- 7.H.2. Where noise mitigation measures are required to achieve the standards of Tables 7-1 and 7-2 (of the Policy Document), the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.

IMPACTS

This section describes the residual impacts which are not mitigated through the policies of the Policy Document.

Traffic Noise Impact

There is a potential for existing noise-sensitive uses that currently are not exposed to unacceptable traffic noise levels to experience increased traffic noise levels, in excess of proposed standards, due to cumulative increases in traffic levels. This impact is considered significant.

MITIGATION MEASURES

Traffic Noise

The exposure of existing noise-sensitive uses that are not exposed to unacceptable traffic noise to be experience noise in excess of the standards of the Policy Document is an unmitigable impact.

RECREATIONAL AND CULTURAL RESOURCES

8.1 PARKS AND RECREATION

ENVIRONMENTAL SETTING

The City currently has approximately 11 acres of parkland. With approximately 11 acres of parkland, the City is currently at a deficit of parkland per 1,000 city residents compared to a national average of 10.5 acres per 1,000 city residents. The City currently has approximately 11 acres of parkland, which is a deficit of parkland per 1,000 city residents compared to a national average of 10.5 acres per 1,000 city residents. The City currently has approximately 11 acres of parkland, which is a deficit of parkland per 1,000 city residents compared to a national average of 10.5 acres per 1,000 city residents.

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RECREATION AND CULTURAL RESOURCES

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CHAPTER 8

RECREATIONAL AND CULTURAL RESOURCES

This chapter assesses the potential implications for development resulting from the *General Plan* on Eureka's recreational and cultural resources, with additional consideration for development implications elsewhere in the Planning Area. The setting summaries are based on a more detailed description in Chapter 8 of the *General Plan Background Report*.

8.1 PARKS AND RECREATION

ENVIRONMENTAL SETTING

The Planning Area primarily contains neighborhood parks and community parks. Neighborhood parks serve primarily the needs of residents living within one-half to three-quarters of a mile, and are generally one to five acres in size. Community Parks serve the needs of residents living between three-quarters of a mile and two miles, and are 30 to 50 acres in size. Regional parks are "areas of natural beauty," and are located within a distance reached by driving one hour or less; this classification includes thousands of acres of lands owned by various county, state, and federal agencies elsewhere in the north coast.

The City currently has approximately 111 acres of parkland. With approximately 28,000 residents, this means that the city possesses approximately four acres of parkland per 1000 city residents, compared to a standard for parkland areas in the 1977 General Plan of three acres per 1000 residents. The City currently has 25 park and recreational facilities under its control in the Planning Area.

Recreation programs in the city are offered by the City for the benefits of its residents, and include various organized sports leagues, non-competitive sports and activities programs, and a seasonal (primarily summertime) activities program. The capability for offering these programs is a function of the City's budget status.

The City has a well-developed coastal access program under the requirements of the City's adopted Local Coastal Plan, providing access to the Humboldt Bay shoreline at locations from the northern Eureka waterfront to the mouth of Elk River. In addition, the Planning Area incorporates additional coastal access points in the unincorporated area outside the city, especially on the Samoa Peninsula, subject to the coastal access planning standards in the Humboldt County Local Coastal Program.

Eureka has a thriving arts community. There are eleven art galleries and four museums in the city, as well as several theater companies serving the Eureka area. The city was designated by the California Department of Commerce as a Main Street City in 1992, in part to demonstrate how the arts relate to economic development. Arts programs, arts facilities, and artists have been identified as a major factor in the potential for the city to become a tourism destination in the western United States.

METHODOLOGY

Assumptions

The analysis in this section was based on the information contained in the *Background Report*, and was conducted for the policy basis of the *General Plan* by assuming development consistent with the *Policy Document*. In conducting the analysis of future development effects, the following assumptions were made:

- Community parks in the Planning Area are presumed to serve the needs of the entire city or large segments of the city's population, while neighborhood parks in the city are assumed to serve the needs of smaller, more locally focused areas;
- Some neighborhood park needs in the city are currently met, and will continue to be met, by community park spaces, but the needs for community parks cannot be met by neighborhood parks;
- The abundant opportunities for outdoor recreation close to Eureka are assumed to address the needs of city residents for regional parks, as well as filling the need for some aspects of outdoor recreation generally associated with community parks;
- City residents will continue to use school facilities for recreational purposes;
- The numbers and kinds of recreational programs offered by the City will continue to depend on adequate funding levels within the City's budgeting process, rather than being linked to development projects;
- Artists of all kinds will continue to find Eureka and its surroundings an attractive place for living and working, based on the natural and the built environment, and the art work produced by the artists will enhance the attractiveness of the city for residents and visitors.

Thresholds of Significance

Appendix G to the CEQA Guidelines includes only one threshold of significance for the topics covered in this section: a proposed plan or project has a significant environmental effect if it conflicts with established recreational uses of an area. This *EIR* interprets this threshold such that the adoption or implementation of the *General Plan* has a significant effect if it would lead to conflicts with existing recreational uses in the city or if the implementation would result in unmet needs for recreational programs or park lands because of new development resulting from the *General Plan*.

With respect to specific standards identified in the *General Plan*, a significant impact on park land facilities would result if new development increased population levels such that the following specific thresholds were exceeded (that is, so that the park land areas per 1,000 residents became less than the identified standards):

- Neighborhood Parks: 1.0 acre per 1,000 city residents;
- Community Parks: 3.0 acres per 1,000 city residents.

IMPLICATIONS OF THE LAND USE DIAGRAM

With respect to park lands, the *General Plan* adopts the standards identified above (*Policy Document*, Table 5-1). The population growth projected for the city as a consequence of implementing the *Land Use Diagram* probably will not increase population levels in the city enough to cross the threshold standards identified above.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies to address parks and recreation.

General Parks and Recreation

- 5.A.1. The City of Eureka will work with other park and recreation service providers to ensure the availability of a park and recreational system that include sufficient diversity of areas and facilities to effectively serve the varied characteristics, densities, needs, and interests of Eureka residents and visitors. The City shall promote the development of parks according to the following principles:
- Neighborhood parks should be located within the residential areas of the City with direct access from a collector street and should include both active and passive recreational uses in order to serve as a multi-activity neighborhood recreational center.
 - Community parks should provide for popular forms of recreation which require more space than would be available in the residential neighborhood park. Community parks should be designed to provide active and passive recreational facilities for all age groups while being compatible with surrounding development. Community parks should have convenient access from arterial streets in order to serve the entire community.
 - Trails should meander through residential neighborhoods and/or scenic areas. Trails should connect to community parks and schools, which should provide access points to the trails. Trails should not cross arterial streets frequently and should provide as many interesting vistas and view points as feasible.
 - New parks and recreational facilities shall be developed to minimize impacts on environmentally sensitive areas such as wetlands and riparian habitat.
- 5.A.2. The City shall upgrade Eureka's established park system as necessary to better serve the needs of the general public.
- 5.A.3. The City shall strive to achieve the open space and recreation standards shown in Table 5-1 (from the Policy Document).

TABLE 5-1 (from the Policy Document)

OPEN SPACE AND RECREATION STANDARDS

Type of Facility	Radius of Service (miles)	Service Population	Site Size (Acres)	Acres per Thousand Persons	Location
Neighborhood Park	½ to ¾	3,000 to 8,000	1 to 5	1.0	Near Center of Neighborhood, Access from Collector Street
Community Park	¾ to 2	8,000 to 20,000	30 to 50	3.0	Near Boundary of Residential Area, Access from Arterial Street
Trails	¾ to 2 to access point	25,000 to 35,000	One Trail System	10.0	Within Residential Areas and/or Scenic Areas, Access from Community Parks and Schools

Coastal Recreation and Access

- 5.B.1. The City shall provide public open space and shoreline access throughout the Coastal Zone, particularly along the waterfront and First Street, through all of the following:
- Develop Waterfront Drive from the Elk River Interchange to a terminus near Eureka Slough, with provisions for bicycle lanes, pedestrian walkways, and supporting facilities.
 - Establish a walkway system located on or near the shoreline throughout the city's waterfront Core Area.
 - Establish scenic vista points at numerous locations along the waterfront, including construction of a public access vista point at the foot of Truesdale Street.

- d. Consider and protect the scenic and visual qualities of coastal areas that are visible from scenic public vista points and waterfront walkways.
 - e. The City, in cooperation with the Coastal Commission and Coastal Conservancy, shall provide for attractive directional signs that are meaningful on the North Coast so as to assist area residents and visitors alike in identifying visitor-serving, recreational, and historical facilities in the city.
- 5.B.2. On shoreline parcels where recreation or visitor-serving uses are integrated with coastal-dependent uses, the City shall ensure that the recreation or visitor-serving uses are secondary to and compatible with the coastal-dependent uses.
- 5.B.3. The City shall promote the maintenance of and, where feasible, shall provide, restore, or enhance facilities serving commercial and recreational boating, including party or charter fishing boats.
- 5.B.4. The City of Eureka shall protect and enhance the public's rights of access to and along the shoreline, consistent with protecting environmentally sensitive habitats, by:
- a. Accepting offers of dedication that will increase opportunities for public access and recreation and the availability of necessary staff and funding to improve and maintain access ways and assume liability for them;
 - b. Actively seeking other public, community non-profit, or public agencies to accept offers of dedications and having them assume liability and maintenance responsibilities; and,
 - c. Allowing only such development as will not interfere with the public's right of access to the sea, where such right was acquired through use or legislative authorization.
- 5.B.5. For new development between the first public road and the sea, the City shall require the dedication of a vertical access easement to the mean high tide line unless:
- a. Another more suitable public access corridor is available within 500 feet of the site; or
 - b. Access at the site would be inconsistent with other General Plan coastal policies, including existing, expanded, or new coastal-dependent industry, agricultural operations, or the protection of environmentally sensitive habitat areas; or,
 - c. Access at the site is inconsistent with public safety, environmental protection, or military security needs.
- 5.B.6. For new development between the first public road and the sea, the City shall require a lateral access easement along the shoreline unless:
- a. Lateral access at the site would be inconsistent with other General Plan coastal policies, including existing, expanded, or new coastal dependent industry, agricultural operations, or the protection of environmentally sensitive habitat areas; or,
 - b. Access is inconsistent with public safety or military security needs.
- 5.B.7. The City shall establish a coordinated continuous public access system throughout its Coastal Zone, consisting of pedestrian walkways, nature walks, and bikeways with necessary support facilities, as described in Table 5-2 and shown in Figure 5-1 (of the Policy Document).
- 5.B.8. The City shall enforce the access standards and recommendations contained in the State Coastal Conservancy/Coastal Commission Report on Coastal Access (revised August 1980) as the criteria for improvement, maintenance, and management of accessways and supporting facilities proposed in this General Plan. Special attention in design and construction of accessways shall be given to minimizing maintenance requirements given the North Coast climate and to minimizing the possibilities of vandalism. Where public accessways or vista points are located near environmentally sensitive habitat areas, attractive barriers shall be provided to preclude disturbance of natural areas by off-road or all-terrain vehicles.

- 5.B.9. *The City shall ensure that public access support facilities are distributed throughout the Eureka Coastal Zone. Off-street parking shall be provided in the waterfront area; however, it shall not be located immediately adjacent to the shoreline, unless there is no feasible alternative.*
- 5.B.10. *To the maximum extent feasible, the City shall ensure universal public access to the waterfront, including support facilities.*
- 5.B.11. *The City shall participate in the development of a facility for the Humboldt Bay Rowers Association on the waterfront.*

Recreation Services

- 5.C.1. *The City shall consider the needs of all age groups, abilities, disabilities, and special interest groups in its park, recreation, and community services planning.*
- 5.C.2. *The City shall encourage and support agencies that actively provide recreation and community service programs and activities.*
- 5.C.3. *The City shall ensure that a mechanism is in place to provide opportunities for participation by economically disadvantaged families and individuals.*
- 5.C.4. *The City shall provide supervision of park areas to protect the rights of the users of the parks and reduce vandalism and shall work with law enforcement agencies to eliminate crime at parks and recreation facilities.*
- 5.C.5. *The City shall provide an ongoing emphasis on youth programs and services, especially those that provide positive educational and social influences to youth at risk for illegal, anti-social, or unhealthy behaviors.*
- 5.C.6. *The City shall ensure a wide range of services, activities, and programs reflecting the cultural diversity of the community.*
- 5.C.7. *The City shall ensure the provision of services and programs designed for physically and mentally challenged citizens, and make reasonable accommodations for the participation of such individuals in City programs.*
- 5.C.8. *The City shall provide opportunities for citizen input and participation in the planning of recreation and community services programs and activities.*

Arts and Culture

- 5.D.1. *The City shall establish the Core Area as the city's and region's focal point for entertainment, cultural, and community activities.*
- 5.D.2. *The City shall continue to support the local arts community through its participation in the Cultural Arts Resource District, the Phantom Art Gallery program, and similar programs.*
- 5.D.3. *The City shall support efforts to establish a performing arts-theater center in the area bounded by 6th and 7th and E and F Streets.*
- 5.D.4. *The City shall actively support the establishment of a community center in the downtown area to meet both the civic and cultural needs of the community.*
- 5.D.5. *The City shall encourage coordination among local arts and cultural groups and events to expand their appreciation by the community.*

5.D.6. *The City shall encourage the development of entertainment, recreational, and cultural activities for youth.*

IMPACTS

New development in the city under the *General Plan* will not create a significant need for additional neighborhood or community parks. In addition, existing City policies and policies in the *General Plan* require that new development contribute to financing park land acquisition, if necessary. The Coastal Act requirements for shoreline access are also addressed by policies in the *General Plan*. The City will continue to provide recreational programs for its residents to the extent allowed by the City's budget. The *General Plan* includes policies to protect existing cultural arts programs and to expand those programs. The impact of the *General Plan* on parks and recreation is, therefore, considered to be less-than-significant.

MITIGATION MEASURES

No mitigation measures are necessary beyond the policies and programs in the *Policy Document*.

8.2 HISTORICAL AND ARCHAEOLOGICAL RESOURCES

ENVIRONMENTAL SETTING

Historical Resources

The Eureka Planning Area includes a wealth of historical resources, and provides a background for the Eureka area that colors and influences the cultural environment of the city to this day. European American settlement began in the Eureka area less than 150 years ago, making this area one of the last settled in the United States. Because of the late settlement, many representations and examples of the historical setting still exist.

Eureka, which was originally established along the shore of Humboldt Bay in the general area of "Old Town," has grown to include the sites of two other original settlements in the area, Cutten and Bucksport. The Planning Area also includes the original settlement locations for Fields Landing, Buhne's Point (King Salmon), Humboldt Hill, Elk River, Freshwater Corners, Walker's Point (Indianola), Samoa, and Fairhaven.

Eureka's historical development was associated primarily with the growth of the timber industry, and underwent growth spurts during industry boom times; during these periods residential and commercial construction led to annexations to the city and to bursts of construction. Following the end of World War II, residential development surged, especially in areas that were near the city's margins at the time. Examples of structures and whole districts with historical significance still exist within the city, all of which resulted from the development periods of the city's history.

Structures are generally thought to demonstrate historical significance at an age greater than approximately 50 years, and many structures in Eureka are older than that; many of the residential developments constructed after the end of World War II are approaching that age. Beyond the mere age of structures, however, historical significance carries a context element: structures still in the context in which they were originally constructed are historically significant for that reason. The city of Eureka has many historically significant districts with the original construction arrangement preserved.

Evidence in recent years suggests that the historical significance of the city, in the form of its older buildings and their physical arrangement in districts, has shaped the perceptions of the city for residents and visitors alike. This has, in turn, shaped the growth of the community, and appears to have implications for future economic growth in the area, because of the appeal of the historical aspects of the city's built environment for artists, visitors, and new residents.

Archaeological Resources

Prior to the time of European American settlement in this area, the Humboldt Bay region was occupied by a people ethnographically known as the Wiyot, who numbered between 1,000 and 3,000 persons and lived in villages away from the immediate coast, near major water bodies including Humboldt Bay. Following the settlement of this region by European Americans, the Wiyot were severely reduced in numbers by diseases and by hostile actions. At the present time, there are approximately 200 persons of Wiyot descent in the Humboldt Bay region.

The Planning Area currently is known to contain 47 recorded archaeological sites; however, earlier ethnographically based studies in the area indicated that as many as 172 sites were known from Wiyot territory, and there are known to exist additional sites which were not among those identified in these earlier studies. There are likely to be other, presently unrecorded, sites in the Planning Area. The most likely locations for additional archaeological sites is a band along the Humboldt Bay shoreline approximately 1,000 meters wide, but the possibility of encountering archaeological resources virtually anywhere in the Planning Area cannot be ruled out.

METHODOLOGY

Assumptions

This analysis was conducted qualitatively by considering archaeological and historical resources known or anticipated to be present in the Planning Area, as described in the *Background Report*, in relation to the *Land Use Diagram*. The analysis specifically incorporates the following assumptions about archaeological and historical resources in the Planning Area:

- The existing knowledge about archaeological and historical resources in the Planning Area is a satisfactory basis for assessing the potential effects of the *General Plan*;
- Unknown archaeological resources exist in the Planning Area which have not been or cannot be identified on the basis of existing knowledge, although these currently unknown resources may be identified in conjunction with proposed development projects;
- Additional individual structures or districts within the Planning Area will gain historical significance as time passes, and the level of historical significance in the Planning Area will increase as time passes;
- Additional structures of historical significance will be lost because of fires, redevelopment, nuisance abatement, and other natural and non-natural causes.

Thresholds of Significance

Appendix G to the *CEQA Guidelines* includes a specific threshold of significance for archaeological and historical resources: a proposed program will have a significant effect under CEQA if it disrupts or adversely affects a prehistoric or historic archaeological site or a property of historical or cultural significance to a community or to an ethnic or social group. This *EIR* also recognizes that a significant environmental impact occurs if development or redevelopment according to the policies in the *General Plan* creates impacts on historical structures listed on or eligible for listing on the National Register of Historic Places.

IMPLICATIONS OF THE LAND USE DIAGRAM

Historical Resources

Many historical resources exist within the city. Given the relatively minor potential for new development within the city limits, it is unlikely that new development would threaten historical structures or districts. Natural disasters (e.g., earthquakes or fires) can destroy historic buildings, especially those that have not been retrofitted to more modern building standards. Redevelopment, or redevelopment in combination with new development, could, however, threaten existing historical resources and neighborhoods in the city. In addition, nuisance abatement in the city has already resulted in losses of historically significant structures, and further abatement could create additional losses in historical structures and/or districts.

Archaeological Resources

A number of archaeological sites have been identified previously in the Planning Area, but it is unlikely that all archaeological sites within the Planning Area have been located. Known areas of highest sensitivity were identified in the *General Plan Background Report*.

GENERAL PLAN POLICY RESPONSE

The *Policy Document* includes the following policies related to historic and archaeological resources.

Historic Preservation

- 5.E.1. The City shall designate historic districts for the restoration and preservation of those areas, buildings, and sites in Eureka that are of historic, cultural, and/or architectural significance.
- 5.E.2. The City shall support the registration of cultural resources in appropriate landmark designations (i.e., National Register of Historic Places, California Historical Landmarks, Points of Historical Interest, or Local Landmark).
- 5.E.3. The City shall give highest restoration priority to those buildings and open space areas identified as having historic, cultural, or architectural significance that are in imminent danger of decay or demolition and vulnerable to earthquake damage (e.g., unreinforced masonry buildings).
- 5.E.4. The City shall encourage federal and state governments as well as financial institutions and private citizens to provide loans for refurbishing historical buildings and restoring artifacts and memorabilia.
- 5.E.5. The City shall sponsor and support legislation to provide incentives for maintaining and enhancing structural stability and aesthetic value of significant structures.
- 5.E.6. The City shall encourage local citizens to cooperate in a campaign to identify and publicize the significance of historical sites and buildings.
- 5.E.7. The City shall prepare and adopt design review guidelines that provide for architectural review of new developments and of exterior alterations to existing structures in designated historical areas.
- 5.E.8. The City shall review all building or demolition permits for buildings either designated historic or within historical districts to ensure, where feasible, the preservation of these historic facilities.
- 5.E.9. The City shall protect and enhance the integrity of the historical atmosphere by supporting the restoration, renovation, and quality replication of historic buildings.

5.E.10. *The City shall promote re-use of historic buildings for both public and private uses.*

Archaeological Resources

- 5.F.1. *The City shall solicit the cooperation of the owners of cultural resources, encourage those owners to treat these resources as assets rather than liabilities, and encourage the support of the general public for the preservation and enhancement of these resources.*
- 5.F.2. *The City shall solicit the views of the Native American Heritage Commission and/or the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.*
- 5.F.3. *The City shall coordinate with Humboldt County to promote the preservation and maintenance of archaeological resources in the Planning Area.*
- 5.F.4. *The City shall use, where feasible, incentive programs to assist private property owners in preserving and enhancing cultural resources.*
- 5.F.5. *The City shall require that discretionary development projects identify and protect from damage, destruction, and abuse, important historical, archaeological, and cultural sites and their contributing environment. Such assessments shall be incorporated into a citywide cultural resource data base.*
- 5.F.6. *The City shall require that discretionary development projects are designed to avoid potential impacts to significant cultural resources whenever feasible. Unavoidable impacts, whenever feasible, shall be reduced to a less than significant level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance, and mitigation shall be made by qualified archaeological or historical consultants, depending on the type of resource in question.*
- 5.F.7. *The City shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.*
- 5.F.8. *The City shall consider acquisition programs as a means of preserving significant cultural resources that are not suitable for private development. Organizations that could provide assistance in this area include, but are not limited to, the Archaeological Conservancy and The Nature Conservancy.*

IMPACTS

Historical Resources

Over time, with or without adoption of the *General Plan*, some historic resources will be lost as the result of natural disasters, for health and safety reasons, and because it will not be economically feasible to restore or renovate them. Development resulting from the *General Plan* is unlikely to have major adverse effects on historical resources or districts. In fact, the *General Plan* includes policies promoting preservation of historic buildings and districts. Despite these efforts, redevelopment or nuisance abatement could result in the demolition or alteration of historically significant buildings or the disruption of historical neighborhoods. The *Policy Document* includes policies which will result in increased attention for historical resources. These policies provide protection for historical structures, and should ensure that future City actions will be compatible with these resources. However, it is possible that private development activities consistent with the *Policy Document* will not be compatible with maintaining all of the existing historical resources in the city. Impacts resulting from development according to the *General Plan* on historical resources could range from less-than-significant (the most likely result) to significant. This *EIR* is unable to draw more specific conclusions, because the degree of impact may differ depending on the specific conditions of historical

properties and the timing of natural disasters. Such future conditions cannot be predicted. As a result, the impacts of the development activity associated with implementation of the *General Plan* are considered potentially-significant.

Archaeological Resources

Development and redevelopment could adversely affect archaeological resources in the Planning Area. Not all such resources have been identified at the present time. However, the General Plan Policy Document contains policies which are anticipated to result in identifying those resources, which should result in their protection or satisfactory recovery. The impact of the *General Plan* on archaeological resources is, therefore, considered to be less-than-significant.

MITIGATION MEASURES

Historical Resources

For historical resources, this *EIR* finds that the policies in the *General Plan* will significantly reduce potential impacts. However, it is not known whether all significant losses of historical resources can be avoided. The uncertainty arises because future discretionary decisions by City decision-makers cannot be predicted. This *EIR* does not recommend additional programmatic mitigation measures, although the City should consider specific mitigation measures to protect historical resources in project-specific contexts.

Archaeological Resources

For archaeological resources, no mitigation measures beyond the policies in the *General Plan* are necessary. To help the City in identifying and avoiding impacts to known or unidentified archaeological sites, the City should consider adding a program to the *Policy Document* that would establish a routine process for referring development proposals to the Northwest Information Center at Sonoma State University.

CHAPTER 9

ALTERNATIVES AND OTHER MANDATORY CEQA SECTIONS

9.1 INTRODUCTION

This chapter of the *EIR* addresses several topics that the *CEQA Guidelines* specifically requires be discussed in all *EIRs*. These are alternatives, significant irreversible effects, growth-inducing impacts, cumulative impacts, and mitigation monitoring. The *Guidelines* indicates a preference that these subjects be discussed in separate sections or paragraphs, but allows for the inclusion of a table showing where each of the subjects is discussed within the *EIR*. This chapter combines the two approaches, with separate discussions of each mandatory topic and references to appropriate sections elsewhere in the *EIR* for elaboration on the discussion included here.

9.2 REQUIREMENTS FOR ALTERNATIVES

The following paragraphs discuss the requirement of State law that *EIRs* include descriptions of the alternatives to a proposed project that have been considered. The first section describes the general requirements of CEQA and the second section summarizes the directions of the California *General Plan Guidelines* with respect to the consideration of alternatives in general plan projects.

CEQA GUIDELINES

According to the *CEQA Guidelines*, an *EIR* must "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." (§15126[d]) Following are the directions that the *CEQA Guidelines* provide regarding the discussion of alternatives within an *EIR*.

- (1) Purpose. Because an *EIR* must identify ways to mitigate or avoid the significant effects that a project may have on the environment (*Public Resources Code* §21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.
- (2) Selection of a range of reasonable alternatives. The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic purposes of the project and could avoid or substantially lessen one or more of the significant effects. The *EIR* should briefly describe the rationale for selecting the alternatives to be discussed. The *EIR* should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record.
- (3) Evaluation of alternatives. The *EIR* shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effect of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant

effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed (*County of Inyo v. City of Los Angeles*, 124 Cal. App.3d 1).

- (4) "No project" alternative. The specific alternative of "no project" shall also be evaluated along with its impact. The "no project" analysis shall discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.
- (5) Rule of reason. The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant impacts of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making.

GENERAL PLAN GUIDELINES

The *General Plan Guidelines* further elaborate on CEQA's requirements as they pertain to the preparation of general plans, stating as follows:

For any set of goals and objectives, there will be a number of possible courses of action a community may pursue. Alternative plan proposals should be developed and tested at this stage to enable a community to examine its possible planning scenarios. Besides the goals and objectives, the varying plans should consist of alternative sets of principles, policies, standards and plan proposals.

The nature and detail of the alternatives will depend upon the extent of the planning program. For new general plans and comprehensive general plan revisions, the alternatives will often focus on population levels and on the scale, location, and type of development. The alternatives in a more limited planning program, such as for a single element, will deal with a narrower range of options. To the extent possible, the alternatives should be developed with implementation measures in mind. This will ensure the feasibility of the basic policies.

The alternatives need not be mutually exclusive. Ultimately, the decision makers may select an amalgamation of two or more alternatives as the best choice. (*General Plan Guidelines*, Chapter II: Preparing And Amending The General Plan, p. 53)

9.3 IDENTIFICATION, SELECTION, AND EVALUATION OF ALTERNATIVES

As a practical matter, because of the comprehensive nature of the general plan, the policy and program alternatives that could conceivably be combined with variations in the land use pattern are infinite. For most policies in the plan, there is at least one alternative, and for many, if not most, individual parcels of land, there is at least one feasible alternative land use designation. The evaluation of the impacts of all these alternatives and their many combinations is simply not feasible or useful.

The alternatives identification, selection, and evaluation process is further complicated in Eureka because the city is situated, both physically and economically, such that the range of alternatives that can reasonably be considered is limited. From a physical standpoint, there are simply few options for future development and growth of the city. Humboldt Bay surrounds Eureka to north and west, while existing development, topography, and valuable natural resources restrict new development capacity to the south and east.

From an economic standpoint, future development opportunities are affected by the city's relative isolation and changes in the area's economic base. The city's isolation (in terms of distance, geography, and limited transportation access) from the rest of California and other western states, has limited demand for significant amounts of new development, particularly in recent recessionary times. The decline in the region's resource-based economy (timber and fisheries-related) has further diminished demand for development in the Eureka area.

The combined effects of Eureka's physical and economic setting compelled the City to focus its General Plan Update alternatives process differently than may have been the case in a community with a broader range of legitimate land use choices. Rather than focusing on questions related to how and where to accommodate demand for future development (e.g., how much, what pace, what direction), the City emphasized a series of strategic considerations related to revitalization and infill. The following paragraphs describe the process that the City used to consider choices in defining its preferred General Plan alternative.

IDENTIFICATION OF ALTERNATIVES

For purposes of satisfying the spirit of CEQA's requirement to address alternatives, this section of the *EIR* describes the process by which the City considered land use and policy alternatives and then describes additional alternatives to address CEQA's directions concerning alternatives.

Constraints, Opportunities, and Directions Report/Preferred Alternative

As part of the General Plan Update process, the City of Eureka prepared and considered a General Plan *Constraints, Opportunities, and Directions Report*. This report identified the most critical issues to be addressed in the General Plan. The report was divided into five chapters, as described below:

- Chapter 1 provided a snapshot of current conditions and trends in Eureka, summarizing how Eureka residents felt about their community based on a survey in Spring 1993, and described five critical issues for the General Plan Update.
- As a foundation for the discussion of land use and development, Chapter 2 focused on Eureka's economic future. The chapter assessed trends, constraints, and opportunities relative to various sectors in Eureka's economy and explored the relationship among these sectors.
- Chapter 3 focused on key geographic areas within Eureka, posing options for how they might be treated in the updated General Plan.
- Chapter 4 provided a brief discussion of the annexation process and the major considerations in decisions concerning expansion of the city through annexation.
- Chapter 5 looked at the most critical transportation issues to be addressed in the new General Plan.

Following publication of the *Constraints, Opportunities, and Directions Report*, the City held a townhall meeting in early November 1994 to present the report to the public, and in November and December 1994 the City Council and Planning Commission held joint public hearings to receive public input on the report.

In January and February 1995, the Planning Commission deliberated on the report and formulated its recommendations to the City Council. In March and April 1995, the City Council in turn deliberated and, by resolution, provided staff and the Consultants with policy direction for preparing the *Draft General Plan*. That direction provided the foundation for development of new policies and modification of existing policies for incorporation into the *Policy Document*.

Based on this public review and comment on this report, and review and recommendations by the General Plan Review Committee and Planning Commission, the City Council provided direction on the preferred alternative for the *Draft General Plan*. City staff and consultants then integrated the essential directions from the *Constraints, Opportunities, and Directions Report* into a larger set of foundational policies related to a full range of issues required to be addressed per the requirements of State law. This included a core set of natural resource protection policies and strategies derived from the City's existing General Plan and the 1984 *Local Coastal Program Land Use Plan*. The result was the *Draft Policy Document*, which represented the *preferred alternative* for purposes of CEQA.

No Project Alternatives

As described above, CEQA requires that EIRs describe and evaluate the specific alternative of "no project." For purposes of this *EIR* analysis, the City has identified two variations on the no project theme. These are as follows:

No-Project -- No Development Alternative: This alternative assumes no new development in Eureka beyond what is currently built, essentially placing a moratorium on any future development with no new additional annexations. This alternative would allow for no new population or employment growth. This alternative responds to the findings of *Dusek v. Anaheim Redevelopment Agency* (4th Dist. 1986) 173 Cal. App. 3d 1029, 1043 [Cal.Rptr.346]. In that case, the Courts stated that "[a] 'no project' alternative must describe maintenance of the existing environment as a basis for comparison of the suggested alternatives to the status quo." As a practical matter, it would be extremely difficult for the City to legally prohibit all infill development within the city limits and the City has only limited control over lands outside its city limits but within its sphere of influence and the balance of the Planning Area.

No Project – Existing General Plan Alternative: This alternative assumes the City would not adopt a new General Plan and would continue to rely on the existing *General Plan*. From a physical development standpoint, this alternative would result in a similar amount and pattern of development as the *General Plan*. Continued reliance on the existing *General Plan* would, however, not ensure the same strategic emphasis that is reflected in the *General Plan*, particularly with respect to the Core Area and to development of the city's industrial areas. Furthermore, several of the fundamental presumptions that formed the foundation of the existing *General Plan* are no longer valid, including the development of a depressed Highway 101 alignment through Downtown Eureka.

Aggressive Annexation Alternative

As described above, one of the issues addressed in the *Constraints, Opportunities, and Directions Report* was annexation. Specifically, the report explained the annexation process and the major considerations in decisions concerning expansion of the city through annexation. The report also described the areas adjacent to the existing city limits with respect to consideration of their annexation. In addition, early in the General Plan Update process, in March 1993, the City sponsored an Annexation Workshop. At that workshop, the City's General Plan Consultants reviewed annexation requirements, procedures, and issues and discussed candidate areas for annexation.

Under the Aggressive Annexation Alternative, the City would have selected and proposed specific annexations from those discussed in the *Constraints, Opportunities, and Directions Report* and discussed at the Annexation Workshop for inclusion as part of the *Draft General Plan*.

EVALUATION OF ALTERNATIVES

In considering the adoption of an updated *General Plan*, the City identified five major themes that effectively framed the overall objectives of the *General Plan*. These were as follows:

- Revitalization of the Core Area
- Stimulation of Employment and Industrial Development
- Establishment of the Role of Outlying Commercial Development
- Identification of a Physical Expansion/Annexation Process
- Resolution of Highway 101 Traffic Problems

During the course of public review of the *Constraints, Opportunities, and Directions Report*, the City explicitly considered these items. As a result, the *General Plan* was written to specifically address and strike a balance among all of the themes described above, as reflected in the City Council's directions on the issues addressed in the *Constraints, Opportunities, and Directions Report*. In addition to emphasizing these themes, the *Policy Document* incorporates a comprehensive set of policies and programs to address land use development and environmental quality. The result is a unified *Policy Document* that both addresses Eureka's unique needs and the requirements of State law for general plans.

As part of its deliberations on the *Constraints, Opportunities, and Directions Report*, the City implicitly considered the two no-project alternatives described above. The issues described in that report clearly represented choices that departed from existing General Plan policies and strategies. The City's decisions to pursue these policy departures represented a general rejection of both of the no-project alternatives. This rejection reflected the City's desire to establish a more comprehensive and contemporary approach to pursuing the themes described above. It should be noted, however, that a substantial amount of the existing General Plan policy content was carried forward into the *Policy Document*. The decision to depart strategically from the prescriptions of the existing General Plan was not an absolute rejection of the existing policies and programs. This is particularly true of the *LCP Land Use Plan*, most of which was incorporated into the *Policy Document*.

Also as part of its deliberations on the *Constraints, Opportunities, and Directions Report*, the City rejected the aggressive annexation alternative. The decision to do so recognized the complexity of the annexation issue, particularly as it pertains to Eureka's physical and economic setting. Rather than proposing or assuming specific annexations as part of the General Plan Update process, the City decided to incorporate clear criteria into the General Plan for consideration of future annexations. These criteria are included as policy directions in *Policy Document*. It should be noted that the City's decision not to assume specific annexations within the General Plan did not represent a rejection of the possibility of future annexations. Rather, it reflected a cautious approach to consideration of specific requests based on thorough consideration of the unique aspects of such requests.

As noted above, CEQA requires that EIRs identify the "environmentally superior" alternative. Of the alternatives described above, the No Project - No Development Alternative would be environmentally superior by virtue of the fact that it would result in no changes to the existing development pattern, and would therefore not result in any environmental impacts within the city limits. CEQA further requires that if the environmentally superior alternative is a no-project alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. In the case of the Eureka General Plan, this would be the *General Plan* (preferred alternative), because of the comprehensive manner in which it addresses environmental quality through its policies and programs and because it implies less development than would the aggressive annexation alternative.

9.4 SIGNIFICANT IRREVERSIBLE EFFECTS

CEQA requires that EIRs describe any significant irreversible environmental changes which would be involved in the proposed action should it be implemented.

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts

and, particularly, secondary impacts (such as roadway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with new development that would be permitted under the *General Plan*. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

This *EIR* identifies six impacts as potentially-significant or significant:

1. Roadway levels of service in excess of City standards
2. Contribution to regional nonattainment of State PM10 air quality standards
3. Exposure to seismic hazards
4. Exposure to tsunami hazards
5. Exposure to noise levels in excess of City standards
6. Potential loss of historical resources

Of these, the only impact that could be considered irreversible is the potential loss of historical resources. This loss, however, does not fit CEQA's description of irreversible (i.e., uses of nonrenewable resources such that removal or nonuse of these resources thereafter is unlikely). As a result, this *EIR* concludes that implementation of the *General Plan* would not result in any significant irreversible effects.

9.5 GROWTH-INDUCING IMPACTS

CEQA requires that EIRs address the growth-inducing impact of the proposed action. The *CEQA Guidelines* require that EIRs discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may further tax existing community service facilities so consideration must be given to this impact. The *Guidelines* also call for EIRs to discuss the characteristic of some projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Arguably, any general plan that designates undeveloped land for future development can be defined as "growth-inducing." Since one of Eureka's clear objectives in updating its General Plan is the promotion of economic development and limited accommodation of demand for residential growth, this is the case with the *General Plan*, particularly in respect to areas designated for new development. In promoting such development and accommodating such growth, the *General Plan*, however, attempts to address the potentially adverse implications through policies, programs, and proposals for adequate infrastructure, promotion of a reasonable balance between jobs and housing, and protection of environmentally-sensitive resources.

9.6 CUMULATIVE IMPACTS

The *CEQA Guidelines* require a discussion of the potential cumulative impacts that could result from a proposed project in conjunction with other projects in the vicinity. Cumulative impacts occur when two or more individual effects together create a significant environmental impact, or if they compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place simultaneously or over time.

As a practical matter, an EIR on a comprehensive general plan is an assessment of the cumulative impacts of development within the area covered by the plan. The impact analyses contained in this *EIR* are, in effect,

cumulative analyses because they examine the cumulative effects of growth over the next 15 years in Eureka. On a large cumulative scale, the traffic section (and, by association, air quality, and noise) takes into account regional effects. The *General Plan* sets out policies and programs to address the potentially adverse cumulative effects of new development.

Of the six impacts that this *EIR* determines to be potentially-significant or significant, two are explicitly cumulative in nature. The traffic-related impacts (roadway levels of service in excess of City standards) is a cumulative impact because it reflects an aggregation of locally-based traffic and regional traffic. The air quality impacts associated with development under the *General Plan* (i.e., contribution to regional nonattainment of State PM10 air quality standards) is the other adverse cumulative impact identified in this *EIR*.

9.7 MITIGATION MONITORING

CEQA prohibits a public agency from approving or carrying out a project for which an environmental impact report identifies significant environmental effects, unless one of specified findings relative to mitigation of those effects has been made. Section 21081.6 of the State of California's *Public Resources Code* states that when an agency approves a project subject to implementing mitigation measures (in an *EIR* or Negative Declaration), the public agency must adopt a reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment.

The policies and programs of the *Policy Document* operate to mitigate most of the impacts of new development under the *Plan*. Under Implementation Program 8.1, the City must annually review the *General Plan Policy Document*. As stated in the program, this review shall be used to satisfy the requirements for a mitigation monitoring program.

CHAPTER 10

DRAFT POLICY DOCUMENT/DRAFT EIR COMMENTS AND CITY RESPONSES

10.1 INTRODUCTION

According to Section 15132 of the *State CEQA Guidelines*, final environmental impact reports (FEIRs) must contain the following information:

- (a) The draft EIR or a revision of the draft.
- (b) Comments and recommendations received on the draft EIR either verbatim or in summary.
- (c) A list of persons, organizations, and public agencies commenting on the draft EIR.
- (d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
- (e) Any other information added by the Lead Agency. (*Public Resources Code*).

This chapter responds to items (b), (c), and (d). The following paragraphs describe the City's public review process for the *Draft EIR* and how the responses address the requirements of the *State CEQA Guidelines* for responding to comments received on the *Draft EIR*.

DISTRIBUTION AND REVIEW OF THE DRAFT EIR

The *State CEQA Guidelines* requires that agencies preparing EIRs "provide adequate time for other public agencies and members of the public to review and comment on a draft EIR." (Section 15203). While the law does not generally define what constitutes adequate time, it does specify that draft EIRs submitted to the State Clearinghouse of the Governor's Office of Planning and Research should be subjected to a review period of at least 45 days. Section 15025 of the *State CEQA Guidelines* requires that draft EIRs for four classes of projects be submitted to the Clearinghouse:

- (1) Those for which a state agency is the Lead Agency;
- (2) Those projects for which a state agency is a Responsible Agency, Trustee Agency, or otherwise has jurisdiction over the project;
- (3) Projects of statewide, regional, or areawide significance; and
- (4) Reports prepared pursuant to the requirements of the National Environmental Protection Act (NEPA).

The *Guidelines* (Section 15026 (b)(1)) further defines local general plans as projects fitting into the third category above (i.e., projects of statewide, regional, or areawide significance).

In compliance with requirements described above, the City submitted copies of the *Draft EIR* on the *City of Eureka Draft General Plan* to the State Clearinghouse on July 18, 1996, thus initiating the mandatory review period. At the same time, the City distributed copies of the *Draft EIR* to numerous local agencies, organizations, and individuals with an interest in the General Plan Update. The *State CEQA Guidelines* (Section 15203 (a)) requires that the local review period for a draft EIR be consistent with applicable Clearinghouse review periods, so the City established a review period of slightly longer than 45 days (July 18, 1996, through September 6, 1996) that coincided with the Clearinghouse's review period.

During the review period, the City received 7 written comments, some of which focused on the *Draft Policy Document* and some on the *Draft EIR*. The City also received limited testimony on the *Draft General Plan* at joint City Council-Planning Commission public hearings on September 4, 1996, and September 25, 1996.

ORGANIZATION OF THIS CHAPTER

This chapter of the *Final EIR* includes a photocopy of each written comment letter submitted on the *Draft Policy Document* and/or *Draft EIR* and summarizes the comments of the one person who commented on the *Draft EIR* during public testimony. Each individual comment within these comment letters is marked with a number; following each letter is the City's response to each comment according to its number. Those comments and responses enclosed within a box indicate comments on the *Draft EIR*, and those without boxes indicate comments focusing on the *Draft General Plan* only.

10.2 COMMENTS RECEIVED ON THE DRAFT POLICY DOCUMENT AND DEIR

The comment letters and response sections are organized in the order in which the letters were dated.

No.	Organization	Contact	Date
1.	Schmidbauer Lumber, Inc.	Mark Anderson	08/21/96
2.	Lynne Graham	Lynne Graham	08/28/96
3.	Humboldt County	Gary Bird	09/03/96
4.	California Department of Fish and Game	Herb Pierce	09/04/96
5.	Eureka City Schools	Nancy Howatt	09/04/96
6.	Redwood Region Audubon Society	Jim Clark	09/05/96
7.	California Department of Transportation (Caltrans)	Martin Urkofsky	09/06/96

1. SCHMIDBAUER LUMBER, INC.
August 2, 1996

- 1.1 The Commentor feels that the proposed extension of Waterfront Drive will adversely affect freight movement to and from 14th Street and will achieve very little traffic relief from Broadway.

In April 1996, the City Council authorized the first segment of the extension of Waterfront Drive (from the current terminus at Washington Street south to Railroad Avenue). Prior to approval of the project, the City conducted an environmental review per the requirements of the California Environmental Quality Act (CEQA). That CEQA review covered the issues that the Commentor raises. Construction commenced in late 1996 and is currently proceeding.

- 1.2 The Commentor feels that the proposed extension of Waterfront Drive will adversely affect environmental values in the Palco marsh area.

Program 3.2 calls for the City to conduct a design and right-of-way study for segment of the Waterfront Drive extension south of Del Norte Street; this will include any necessary CEQA review. Staff/Consultants point out that the City expects to be able to develop the two-lane extension within the existing railroad right-of-way, which would avoid environmentally-sensitive areas.

- 1.3 Commentor agrees with Draft Policy Document statements encouraging employment-generating uses and recommends that the City consider the costs of moving freight in and out of the City's industrial areas.

Comment noted; no response necessary.

- 1.4 The City should not discount timber production as a viable industry in the Eureka area, since Humboldt County is the only county in the state with increased harvests since 1992.

Comment noted; no response necessary.

Comments and Responses:

February 1997

The City Council has received and reviewed the comments and responses to the Draft EIR. The City Council has also received and reviewed the comments and responses to the Draft Policy Document.

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Comments and Responses:

2. LYNNE GRAHAM
August 28, 1996

- 2.1 Commentor would like property redesignated from Agricultural to a designation that would permit a mixture of residential, business, and light industrial.

As the Commentor notes, the property in question is constrained by difficult topography and the presence of environmentally-sensitive areas. In recognition of these constraints, the City's Local Coastal Program Land Use Plan, which the City Council adopted and the Coastal Commission approved in 1984, designates/zones the property for Coastal Agriculture. The City feels that continuing to recognize these constraints by designating the property as Agriculture on the General Plan Land Use Diagram is appropriate. In response to the Commentor's inquiry, however, a policy (Policy 1.L.14) has been added to the Policy Document that expresses City support for rezoning and redesignating the property in question, if the property owner can address the concerns of federal and state agencies with jurisdiction over project approval.

1. The City of Eureka is a coastal city with a rich history and a diverse economy. The City's General Plan is a key document that guides the City's future development. The City's General Plan is a key document that guides the City's future development. The City's General Plan is a key document that guides the City's future development.
2. The City of Eureka is a coastal city with a rich history and a diverse economy. The City's General Plan is a key document that guides the City's future development. The City's General Plan is a key document that guides the City's future development. The City's General Plan is a key document that guides the City's future development.
3. The City of Eureka is a coastal city with a rich history and a diverse economy. The City's General Plan is a key document that guides the City's future development. The City's General Plan is a key document that guides the City's future development. The City's General Plan is a key document that guides the City's future development.
4. The City of Eureka is a coastal city with a rich history and a diverse economy. The City's General Plan is a key document that guides the City's future development. The City's General Plan is a key document that guides the City's future development. The City's General Plan is a key document that guides the City's future development.
5. The City of Eureka is a coastal city with a rich history and a diverse economy. The City's General Plan is a key document that guides the City's future development. The City's General Plan is a key document that guides the City's future development. The City's General Plan is a key document that guides the City's future development.

3. COUNTY OF HUMBOLDT
August 28, 1996

- 3.1 The County recommends that *Draft Policy Document* Figure 3-3 (Bikeway System Diagram) show County-designated bicycle/pedestrian corridors in the Cutten, Ridgewood Heights, Pine Hill, and Elk River neighborhoods.

Figure 3-3 has been modified as requested.

- 3.2 The County requests that the *Policy Document* show future connections to unincorporated area roadways.

The roadway classifications shown on the Circulation Diagram (Figure 3-1) are derived from the same traffic model that the County used to identify the roadway network described in its Eureka Area Community Plan. The only major future connection not reflected in Figure 3-1 is a new north-south roadway that would connect Fairway Drive to Ridgewood Drive. The Circulation Plan Diagram has been modified to show this connection.

- 3.3 The County requests that the *Policy Document* include policies concerning parking in the Harrison Avenue corridor.

A sentence has been added to Policy 1.L.13 that addresses parking.

- 3.4 The County acknowledges that the City's consultants worked closely with the County to ensure that the *Draft Land Use Diagram* for the unincorporated Planning Area correspond with County plans.

Comment noted; no response necessary.

- 3.5 The County notes that *Draft Policy Document's* gulch and open space mapping is consistent with their's and further observes that the 30 percent slope requirement for identification and protection of gulches is consistent with the County's.

Comment noted; no response necessary.

- 3.6 The County is concerned that potential annexations are not addressed in sufficient detail in the *Draft Policy Document*.

The City feels that the Policy Document addresses potential annexations at an appropriate level of detail. The type of discussion requested by the County would require that the City have definitive and reliable information available to describe potential annexations; this is not the case. Furthermore, The City points out that it has an ongoing process to discuss specific annexation proposals.

- 3.7 The County recommends that the City add discussions of the funding necessary to implement improvements identified in the *Draft Policy Document*.

The City does not feel that is necessary or appropriate to identify funding strategies within the General Plan. Such funding is subject to the City's ongoing budgetary and capital improvement programming process, and should not be determined by commitments made in the General Plan.

- 3.8 The County acknowledges that the *Draft EIR's* assumptions for development in the unincorporated Planning Area are consistent with County plans.

Comment noted; no response necessary.

- 3.9 In conjunction with comment 3.2, the County requests that the EIR address potential traffic circulation impacts in the unincorporated Planning Area.

The traffic analysis in the EIR recognizes the relationship between traffic originating in the city and that originating outside of the city, including from the unincorporated Planning Area. The analysis also cites level of service impacts on roadways within the unincorporated Planning Area. The City, therefore, feels that the traffic analysis in the EIR is sufficient as it relates to the County's comment.

- 3.10 In conjunction with comment 3.6, the County requests that the EIR address potential open space impacts associated with annexations.

As noted under Comment 3.6, the City feels that it would be inappropriate to address annexations at the level of detail that the County requests. Accordingly, the City feels that the requested analysis would not be warranted.

- 3.11 Recognizing that development under the City's General Plan could result in unmitigable impacts, the County recommends that the City prepare and adopt statements of overriding consideration prior to certification of the Final EIR.

Comment noted; the City prepared statements of overriding consideration as necessary for adoption prior to certification of the Final EIR and adoption of the General Plan.

- 3.12 The County recommends that the City prepare and adopt a mitigation monitoring program that is more elaborate than that described in the Draft EIR.

The City feels that the approach to mitigation monitoring described in the EIR is not only appropriate for a comprehensive planning project, but that it would be more effective than a stand-alone, independently-implemented monitoring program.

- 3.13 The County recommends that the City add a reference to the State Clearinghouse (SCH) number.

The Final EIR refers to SCH number (96072062), which had not been assigned prior to publication of the Draft EIR.

- 3.14 The County requests that the Final EIR include a copy of the initial study/environmental checklist prepared for the project.

Because the City decided that it would prepare an EIR on the General Plan when it prepared the project work program, it did not prepare an initial study or a checklist.

- 3.15 The County recommends that Policy 3.A.10 recognize the County's role in addressing traffic concerns on Highway 101.

The Policy Document has been modified to recognize the County's role.

3.16 The County points out minor inconsistencies between the *Draft Policy Document* and *Draft EIR*.

The Policy Document and the EIR have been modified as necessary to reconcile the inconsistencies.

3.17 The County is concerned that *Draft EIR* statements concerning rail and air service in the Eureka area are subjectively negative and points out that the airport in McKinleyville is the "Arcata-Eureka" Airport.

Comment noted; the reference to airport's name has been changed in the Final EIR.

3.18 The County recommends that the *EIR* recognize the County's role in addressing traffic concerns on Highway 101.

The Policy Document has been modified to recognize the County's role.

3.19 The County points out minor inconsistencies within the *Draft EIR* concerning the size of the city.

The EIR be modified as necessary to reconcile the inconsistencies.

3.20 The County requests more specific discussion of land use around Murray Field, as contained in the *Murray Field Master Plan*. The County also reminds the City that the Airport Land Use Commission (ALUC) must review the *Draft General Plan* prior to adoption.

Comment noted; the City referred pertinent sections of the General Plan to the ALUC for review and received no comments.

3.21 The County requests that the City offer incentives for relocating the County's 2 and J Street facilities (Policy 1.B.13, 1.B.14), consistent with policies concerning privately-owned facilities.

Policy 1.B.13 has been modified to call for a cooperative City-County effort to relocate the facilities in question, including City-provided incentives, where feasible and appropriate.

3.22 The County requests that the *EIR* address the impacts of infill development on flora and fauna resulting from habitat loss.

The EIR analysis of habitat loss does consider the effect of development on infill parcels within the City, so no additional analysis has been prepared in response to this comment.

3.23 The County requests that the *EIR* include a discussion of how parking will be provided in the Core Area.

Chapter 4 of the EIR includes a discussion of parking-related impacts (Section 4.2).

3.24 The County recommends that the City reconsider Policy 1.B.13, which calls for the relocation of the County's 2 and J Street facilities.

Policy 1.B.13 has been modified per the response to Comment 3.21.

- 3.25 The County requests that Policy 4.H.13 be rewritten to remove the implication that safe streets do not exist in the Planning Area.

The City does not agree that the policy implies that existing streets in the unincorporated Planning Area are unsafe.

- 3.26 The County recommends that Policy 6.A.11 be rewritten, because it would be impossible to fill a wetland and maintain its functional capacity.

Policy 6.A.11 is derived from the City's Local Coastal Program, which was adopted in 1984, and is based on language originating with the California Coastal Commission. The City feels that it reflects an appropriate City commitment to protecting local wetlands and estuaries. The City also points out that partial filling of a wetland would not necessarily affect functional capacity, and could conceivably enhance that capacity.

4. CALIFORNIA DEPARTMENT OF FISH AND GAME (DFG) September 4, 1996

- 4.1 DFG requests that the EIR more thoroughly address the potential impacts of extending Waterfront Drive into the Eureka City Elk River Wildlife Area.

Program 3.2 calls for the City to conduct a design and right-of-way study for segment of the Waterfront Drive extension south of Del Norte Street; this will include any necessary CEQA review. The City points out that it expects to be able to develop the two-lane extension within the existing railroad right-of-way, which would avoid environmentally-sensitive areas. It should be noted that the extension of Waterfront Drive would be subject to Coastal Commission approval, since the extension falls entirely within the Coastal Zone.

- 4.2 DFG recommends that Policy 3.A.9 be strengthened to avoid road construction in gulch greenways.

Policy 3.A.9 has been modified in response to the Commentor's concern.

- 4.3 DFG recommends that the General Plan discuss proposals to develop walkways and foot trails in the gulch greenways and that Policy 5.A.1 be modified to clearly discourage development of such walkways or foot trails in environmentally-sensitive areas. DFG also would like the EIR to address walkway proposals.

The City does not agree that independent proposals to develop walkways need to be addressed in the General Plan, since they are not being recommended within the Plan. Likewise, the City does not agree that these proposals should be addressed within the EIR, since they are not part of the project (i.e., the General Plan).

- 4.4 DFG recommends that the City develop definitive maps of gulch greenways, creeks, wetlands, and resource buffers, as well as more definite standards for development in open space and gulch greenway areas.

Programs 6.4 and 6.5 in the Policy Document call for the City to prepare and adopt guidelines for the identification and protection of environmentally-sensitive areas and gulches greenways. These guidelines will help the City establish the types of maps that DFG requests. The City does not feel that it is necessary to incorporate these maps into the General Plan.

- 4.5 DFG recommends that the City consider modifying the provisions in Table 5-2 concerning establishing a heronry-viewing area on State Highway 255 on Indian Island. DFG suggests that Woodley Island might be more appropriate for a viewing area.

Table 5-2 has been modified to eliminate the reference to the heronry-viewing area on Indian Island.

- 4.6 DFG recommends modifying Policy 6.A.11, item b, to add the word "threatened."

Policy 6.A.11 has been revised as recommended.

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11. The Commission staff has also reviewed the City's response to the public comments received during the public hearing and has found that the City's response is satisfactory.

EUREKA CITY SCHOOLS
February 4, 1997

The District recommends adding a policy statement under Goal 1.2 stating that new development consistent in location toward the provision of public services and infrastructure including school facilities.

Staff comments that the City's General Plan includes a policy statement in Goal 1.2 stating that new development consistent in location toward the provision of public services and infrastructure including school facilities. Staff comments that the City's General Plan includes a policy statement in Goal 1.2 stating that new development consistent in location toward the provision of public services and infrastructure including school facilities.

The District requests that the City's General Plan include a policy statement that new development consistent in location toward the provision of public services and infrastructure including school facilities.

Staff comments that the City's General Plan includes a policy statement in Goal 1.2 stating that new development consistent in location toward the provision of public services and infrastructure including school facilities.

The District requests that the City's General Plan include a policy statement that new development consistent in location toward the provision of public services and infrastructure including school facilities.

Staff comments that the City's General Plan includes a policy statement in Goal 1.2 stating that new development consistent in location toward the provision of public services and infrastructure including school facilities.

The District requests that the word "school" in Policy 4.1.2 be changed to "site".

Staff comments that Policy 4.1.2 be changed to "site".

5. EUREKA CITY SCHOOLS
September 4, 1996

- 5.1 The District recommends adding a policy statement under Goal 1.N assuring that new development contribute its fair share toward the provision of public services and infrastructure, including school facilities.

Policy 4.A.10 has been added to the Policy Document requiring new development to contribute its fair share to all public services and infrastructure necessary to serve the development, including schools. Staff/Consultants recommend that this policy be added to Section 4, Public Facilities and Services, under Goal 4.A, not under Goal 1.N, as the District suggests.

- 5.2 The District requests that the *Policy Document* include a policy that would require that legislative or quasi-legislative acts allowing residential developments be conditioned upon development/mitigation agreements between project proponents and the affected school district.

Staff/Consultants feel that it would be inappropriate for the City to condition its legislative decisions on the outcome of agreements established between parties (school districts and developers) over which it has no jurisdictional authority. Staff/Consultants therefore recommend that the requested provision not be included in the General Plan.

- 5.3 The District requests that the *Policy Document* include a series of policies related to school capacity and land for school facilities.

Staff/Consultants feel that the policies listed under Goal 4.H (Schools) address local needs sufficiently for the General Plan. This includes the City's commitment to continuing cooperation with local school districts concerning planning issues.

- 5.4 The District requests that the word "should" in Policy 4.H.6 be changed to "shall."

Staff/Consultants recommend that Policy 4.H.6 be modified as requested.

6. REDWOOD REGION AUDUBON SOCIETY (RRAS)
September 5, 1996

- 6.1 RRAS recommends modifying Policy 6.A.2 to define the area covered by the proposed wetlands management program more definitely.

The City agrees generally with the request, but does not feel that it would be appropriate to expand the program to address the unincorporated part of the City's sphere of influence without explicit County commitment and cooperation.

- 6.2 RRAS recommends modifying Policy 6.A.19 to redefine the approach to measuring buffers around environmentally-sensitive areas.

Policy 6.A.19 has been modified as recommended.

- 6.3 RRAS requests that Policy 6.C.5 (should be 6.C.6.) be modified to reflect a slope standard of 20 percent, rather than 30 percent.

The City feels that the 30 percent standard provides an appropriate level of protection. This is consistent with the slope standard adopted by Humboldt County in 1996 in the Eureka Area Community Plan

- 6.4 RRAS recommends modifying Program 6.3 to address privately-owned wetlands, as well as publicly-owned.

The City feels that Program 6.3 reflects a reasonable City commitment to protecting local wetlands. The City does not feel it would be appropriate to undertake a unilateral program to identify privately-owned wetlands, particularly for areas within the unincorporated sphere of influence, as RRAS suggests.

- 6.5 RRAS recommends modifying Program 6.5 to address restoration of gulches and greenways and to protect natural vegetation.

Program 6.5 has been modified, as recommended.

- 6.6 RRAS requests that the Policy Document include a new program calling for the City to prepare a map of watershed boundaries.

The City agrees that a watershed boundary map would be useful, and has added a new program (Program 6.8) to the Policy Document that calls for the City to cooperate with the County to prepare such a map.

**7. CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS)
September 6, 1996**

- 7.1 Caltrans recommends adding a policy and program to the *Policy Document* calling for adoption of a mechanism to finance transportation improvements. Caltrans also recommends that the *Policy Document* prioritize these improvements.

The City feels that Policy 3.A.5 and the programs included in Section 3, Transportation and Circulation, are appropriate General Plan commitments to addressing major transportation improvements and their costs. Because of the nature the City's ongoing budgetary and capital improvement programming process and the volatility of financing mechanisms, the City feels it would be inappropriate to make specific commitments within the General Plan. The City also feels that it would be inappropriate to prioritize improvement commitments within the General Plan.

- 7.2 Caltrans requests that, for each program listed, the *Policy Document* identify funding sources, priorities, and an explanation of the relationship of the program with goals and policies.

As noted under the response to Comment 7.1, the City does not feel it would be appropriate or necessary to commit to specific funding sources or to prioritize improvements within the General Plan. The City refers the reader to the introduction to Part II of the Draft Policy Document for an explanation of the relationship between goals, policies, and programs.

- 7.3 Caltrans recommends adding intermodal policies to the Section 3 of the *Draft Policy Document*.

The City feels that Section 3, Transportation and Circulation, of the Draft Policy Document expresses strong support for intermodal transportation, particularly Policy 3.B.3, which commits the City to supporting the development of an intermodal center in the Core Area.

- 7.4 Caltrans recommends that the relationship between the *Regional Transportation Plan* and the *General Plan* be clarified. Specifically, is the City incorporating the RTP by reference?

The General Plan does not incorporate the RTP by reference. The citations in the EIR simply document ongoing City participation in efforts to promote water transportation, as expressed in the RTP.

- 7.5 Caltrans recommends adding policies under Goal 3.F addressing rail freight and intermodal connectivity between port, rail, and highway uses.

See response to Comment 7.3

- 7.6 Caltrans recommends adding a policy to Section 3 supporting continuation and coordination of the Amtrak bus feeder service to the Eureka area.

A new policy (Policy 3.B.4) has been added to the Policy Document that recognizes and supports Amtrak's continuing bus feeder service to Eureka.

- 7.7 Caltrans supports Policy 3.A.6.

Comment noted; no response necessary.

- 7.8 Caltrans is concerned that there is not enough room to accomplish the improvements described under Policy 3.H.1 without removing parking and narrowing sidewalks. Caltrans would like the policy to clarify that 4th and 5th Streets will continue to have three through traffic lanes.

Policy 3.H.1 has been clarified as requested.

- 7.9 Caltrans is concerned that Policy 3.H.3 may be unrealistic, particularly given the City's commitments to the Transportation Enhancement Activity (TEA) landscaping project (e.g., proposed "bulbs").

Policy 3.H.3 is intended to focus principally on intersections of E, F, and G Streets with 2nd, 3rd, 6th, and 7th Streets, not on intersections with Highway 101 (4th and 5th Streets), over which Caltrans has jurisdiction. Furthermore, the "bulbs" that Caltrans cites will not require narrowing of E, F, and G Streets, and therefore will not affect the carrying capacity of these streets. The City continues to feel that the objectives furthered by Policy 3.H.3 are important, so no modification has been made to the policy.

- 7.10 Caltrans supports extension of Henderson Street (Program 3.3) and recommends that the City consider adding a westbound right-turn lane on Henderson at the Broadway intersection.

Program 3.3 calls for the City to conduct a focused study of this issue, at which point the recommended turning movements will be considered.

- 7.11 Caltrans supports the improvements to the R Street/5th Street intersection described in Program 3.4 and recommends adding recognition of the need to acquire additional right-of-way for the project.

Program 3.4 calls for the City to conduct a focused study of this issue, at which point the City will consider right-of-way acquisition needs.

- 7.12 Caltrans suggests adding West and V Streets north of Myrtle Avenue to the Circulation Plan Diagram.

This road segment has been added to the Circulation Plan Diagram, as suggested.

- 7.13 Caltrans points out that the provisions in Table 5-2 concerning establishing a heronry-viewing area on State Highway 255 on Indian Island would require extensive Caltrans involvement and recommends that the City initiate consultation with Caltrans as soon as possible.

Table 5-2 has been modified to remove the provision in question.

- 7.14 Caltrans recommends updating the Draft EIR's discussion of the Intercity Rail Passenger Service Feasibility Study.

The discussion has been modified per Caltrans' recommendation.

8. TISH WILBURN (PUBLIC HEARING TESTIMONY)
September 4, 1996

- 8.1 Ms. Wilburn questioned the source in obtaining the PM10 (particulate matter smaller than 10 micrometers in size) information cited in the *Draft EIR*.

The information is derived from air quality monitoring reports published by the North Coast Unified Air Quality Management District (NCUAQMD).

- 8.2 Ms. Wilburn commented on the extension of Waterfront Drive and the effect the extension will have on the enhancement of Palco Marsh.

Program 3.2 in the Policy Document calls for the City to conduct a design and right-of-way study for segment of the Waterfront Drive extension south of Del Norte Street; this will include any necessary CEQA review. Staff/Consultants point out that the City expects to be able to develop the two-lane extension within the existing railroad right-of-way, which would avoid environmentally-sensitive areas.

